**3GPP TSG-RAN WG2 Meeting #125 R2-240xxxx**

**Athens, Greece, 26th February – 1st March 2024**

**Agenda Item: x.x.x.x.x**

**Source: Ericsson**

**Title: Discussion on RILs conclusion mobility**

**Document for: Discussion, Decision**

1 Introduction

In this contribution, a list of RILs for the Mobility IAB work item with relating conclusion and comment is provided.

# 2 Discussion

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Delegate** | **Work Item** | **Class** | **Proposed Conclusion** | **Comment to Proposed Conclusion** | **RIL source leader (who should provide tdoc)** | **Description** | **Proposed Change** | **Comments**  **(Example 🡪 [Ericsson-Tony] bla bla)** |
| C100 | CATT (Rui) | Mob | 1 | PropAgree | [Ericsson-Tony] In principle there should not be much difference between CPAC and subsequent CPAC. However, there are configuration which are CPAC-specific, such as the list of sk-counter. Therefore, I tend to agree that maybe we can add a definition. |  | the definition of the term SCPAC is missing | add the definition for SCPAC SCPAC subseqnent CPAC | [ZTE-Mengjie] Currently, the abbreviation “SCPAC” is not used in the procedural text and field description (“subsequent CPAC” is always used), so it seems no need to add the abbreviation. |
| Z021 | ZTE (Mengjie) | Mob | 1 | PropAgree | [Ericsson-Tony] Tent to agree. I guess we can clarify that apply also for CPAC. |  | The description of subsequent CPAC configuration is missing here. Considering that subsequent CPAC is a new feature different from the legacy CPA/CPC and it also involves with some newly introduced configurations (e.g. scpac-ReferenceConfiguration, sk-CounterConfiguration), it’s suggested to add “subsequent CPAC configuration” to make the description complete and clear. | Add “subsequent CPAC configuration”, e.g.: “to add/modify/release conditional PSCell change or conditional PSCell addition configuration or subsequent CPAC configuration” Or use “to add/modify/release conditional reconfiguration” to cover both CHO and CPA/CPC/subsequent CPAC case, e.g.: to add/modify/release conditional reconfiguration handover configuration, to add/modify/release conditional PSCell change or conditional PSCell addition configuration, |  |
| C101 | CATT (Rui) | Mob | 1 | PropAgree |  |  | The handling for “reconfiguration with sync for LTM cell switch (without security key refresh)” should not be applicable to “reconfiguration with sync for direct-to-indirect path switch” | “, and” should be removed - reconfiguration with sync for direct-to-indirect path switch, not involving RA at target side, involving re-establishment of PDCP /PDCP data recovery (for AM DRB) triggered by explicit indicators, and - reconfiguration with sync for LTM cell switch (without security key refresh), and |  |
| X121 | Xiaomi (Yi) | Mob | 1 | PropReject | [Ericsson-Tony] The UE-based TA measurements is still network controlled and, anyway, the network has the faculty to overcome this and provide a TA value in the MAC CE. |  | UE-based TA measurement has been supported in Rel-18 LTM. Whether to involve or not involve RA to the target SpCell depends not only on the network inidication, but also on whether the UE acquires the TA value(s) of the candidate cell(s) by UE based TA measurement. | Suggest to add “UE-based TA measurement”, e.g. : - involving or not involving RA to the target LTM candidate SpCell according to a network indication or UE-based TA measurement; This RIL is also applicable to the second bullet. |  |
| Z022 | ZTE (Mengjie) | Mob | 1 | PropAgree |  |  | The second bullet of “reconfiguration with sync for LTM cell switch (without security key refresh)” seems redundant. The only different from the first bullet for LTM cell switch and the second bullet is whether to perform re-establishment of RLC and PDCP data recovery (for AM DRB), so it’s suggested to combine them into one bullet to make the spec more concise. | Suggest to remove the second bullet and combine it to the first bullet, e.g. : - reconfiguration with sync for LTM cell switch (without security key refresh), and - involving or not involving RA to the target LTM candidate SpCell according to a network indication; - MAC reset; - depending on a network indication, involving or not involving re-establishment of RLC and PDCP data recovery (for AM DRB). - reconfiguration with sync for LTM cell switch (without security key refresh), and - involving or not involving RA to the target LTM candidate SpCell according to a network indication; - MAC reset; - depending on a network indication, no re-establishment of RLC. |  |
| C102 | CATT (Rui) | Mob | 1 | Duplicate | [Ericsson-Tony] See conclusion for Z022. Anyway, the suggestion in C102 is correct. |  | the handling “depending on a network indication, no re-establishment of RLC” should only be applicable to the case “reconfiguration with sync for LTM cell switch (without security key refresh)” | - reconfiguration with sync for LTM cell switch (without security key refresh), and - involving or not involving RA to the target LTM candidate SpCell according to a network indication; - MAC reset; - depending on a network indication, no re-establishment of RLC. |  |
| Z023 | ZTE (Mengjie) | Mob | 1 | PropAgree | [Ericsson-Tony] Similar to Z021 |  | The description of subsequent CPAC configuration is missing here. Considering that subsequent CPAC is a new feature different from the legacy CPC and it also involves with some newly introduced configurations (e.g. scpac-ReferenceConfiguration, sk-CounterConfiguration), it’s suggested to add “subsequent CPAC configuration” to make the description complete and clear. | Add “subsequent CPAC configuration”, e.g.: “to add/modify/release conditional PSCell change configuration or subsequent CPAC configuration” |  |
| Z024 | ZTE (Mengjie) | Mob | 1 | PropAgree |  |  | The SN RRCReconfiguration message can also be used to release the LTM configuration associated with the SCG, i.e. not only configure and re-configure the LTM configuration. | Suggest to change “(re-)configure” to “add/modify/release”. |  |
| Z025 | ZTE (Mengjie) | Mob | 1 | PropAgree |  |  | The description of subsequent CPAC is missing here. Considering that subsequent CPAC is a new feature different from the legacy CPA/CPC and it can be configured when DC is not configured (e.g., for the initial CPA and the following CPC), it’s suggested to add “subsequent CPAC” to make the description complete and clear. | - the conditionalReconfiguration for CHO, or CPA or subsequent CPAC is included only when AS security has been activated, and SRB2 with at least one DRB or multicast MRB or, for IAB, SRB2, are setup and not suspended; |  |
| E71 | Ericsson (Tony) | Mob | 2 | Disc | [Ericsson-Tony] This issue will be discussed based on companies' contributions which are outside of the ASN.1 review procedure | No RIL source companies. All companies can contribute because this is outside of the ASN.1 reivew. | The coexistence of LTM and other types of mobilities and other features (e.g., CHO) need still to be discussed. This RIL is just for bookkeeping and the understanding is that this will be discussed based on companies’ contributions. | Discuss the coexistence of LTM with other features based on companies’ contributions. |  |
| Z026 | ZTE (Mengjie) | Mob | 1 | PropAgree |  |  | The description of subsequent CPAC is missing here. Considering that subsequent CPAC is a new feature different from the legacy CPA/CPC, it’s suggested to add “subsequent CPAC” to make the description complete and clear. | The UE shall perform the following actions upon reception of the RRCReconfiguration, upon execution of the conditional reconfiguration (CHO, CPA, or CPC or subsequent CPAC), or upon execution of an LTM cell switch: |  |
| O200 | OPPO (Xue) | Mob | 1 | Disc | [Ericsson-Tony] As also commented by QC, the coexistance of CPAC with other existing features is something that needs to be discussed. I suggest OPPO to provide a contribution and co-ordinate with the other companies (e.g., QC). | OPPO (to coordinate with the other companies) | The NW can not distinguish the first CHO attempt and CHO recovery. Thus, the handling of SCPAC configuration for CHO recovery shall be the same as the first CHO attempt (i.e., rely on NW to explicitly release). | 2> remove all the entries in the condReconfigList within the MCG and the SCG VarConditionalReconfig except for the entries in which subsequentCondReconfig is present, if any; |  |
| C103 | CATT (Rui) | Mob | 1 | PropAgree | [Ericsson-Tony] We can make clear in the text on which cell group the LTM release should be performed. |  | Whether the “LTM configuration release” is for MCG or SCG is not indicated here, it should be indicated otherwise it cause ambiguity in 5.3.5.18.7. | 2> else: 3>if the RRCReconfiguration message is received via SRB1, and the RRCReconfiguration message is not included within the nr-SCG within mrdc-SecondaryCellGroup; 4> perform the LTM configuration release for MCG as specified in clause 5.3.5.18.7; 3>else: 4> perform the LTM configuration release for SCG as specified in clause 5.3.5.18.7; |  |
| Z027 | ZTE (Mengjie) | Mob | 1 | PropAgree |  |  | The description of subsequent CPAC is missing here. Considering that subsequent CPAC is a new feature different from the legacy CPA/CPC and there is a separate section for subsequent CPAC execution, it’s suggested to add “subsequent CPAC” to make the description complete and clear. | 2> if the RRCReconfiguration is applied due to a conditional reconfiguration execution for CPC or subsequent CPAC which is configured via conditionalReconfiguration contained in nr-SCG within mrdc-SecondaryCellGroup; or |  |
| S792 | Samsung (Aby) | Mob | 1 | PropReject | [Ericsson-Tony] The existing procedure is already clear. My understanding is that there is no misundestanding in this case. In fact the identation 1> is "else if the RRCReconfiguration message was received via SRB3 (UE in NR-DC):". Further, I guess that the understanding is that the presence of SRB3 cannot be touched when doing an inter-SN LTM or CPAC. |  | UE may not have a SRB3 configuration for Subsequent CPAC or LTM here if it is not present in candidate configuration or reference configuration, so RAN2 needs to discuss whether there is any need to map the ReconfigurationComplete on the same SRB as the one sending RRCReconfiguration for subsequent CPAC and LTM. [Proposed Change]: If companies still think that complete needs to be send on same SRB on which configuration is send, =>it needs to be discussed the RRCReconfiguration refers to the one that is adding Subsequent CPAC (or LTM) configuration, adding reference configuration, message that has last modified subsequent CPAC (or LTM) configuration, message that has last modified reference configuration. =>Either UE may be allowed to send RRCReconfigurationComplete over SRB1 or there needs to have a restriction at network from configuring the UE without SRB3 when the RRCReconfiguration is send over SRB1 | If companies still think that complete needs to be send on same SRB on which configuration is send, =>it needs to be discussed the RRCReconfiguration refers to the one that is adding Subsequent CPAC (or LTM) configuration, adding reference configuration, message that has last modified subsequent CPAC (or LTM) configuration, message that has last modified reference configuration. =>Either UE may be allowed to send RRCReconfigurationComplete over SRB1 or there needs to have a restriction at network from configuring the UE without SRB3 when the RRCReconfiguration is send over SRB1 | [Samsung-Aby] The issue “UE may not have a SRB3 configuration for Subsequent CPAC or LTM here if it is not present in candidate configuration or reference configuration” can occur based on current specification, because unlike pre-R17 mobility where SRB3 is always released using srb3-ToRelease flag, UE may release SRB3 configuration based on candidate configurations in LTM/Subsequent CPAC even without srb3-ToRelease.  While using srb3-ToRelease, SRB3 is always released  via SRB1 and only at mobility as below. So if the target cell doesn’t have SRB3, the configuration would have been received in SRB1 only.   |  | | --- | | srb3-ToRelease: Release SRB3. SRB3 release can only be done over SRB1 and only at SCG release and reconfiguration with sync. |   The point is there is no such restriction captured for  LTM or subsequent CPAC in the spec.  So as per spec, SRB3 may not be available in the target cell and the UE may release SRB3 based on candidate configuration (i.e. not through srb3-ToRelease) as per below sections. So we think it is not possible to ‘always’ send the ReconfigurationComplete via SRB3, for LTM and subsequent CPAC.   |  | | --- | | 5.3.5.13.8        Subsequent CPAC execution  1> release the radio bearer(s) and the associated logical channel(s) that are part of the current UE configuration but not part of the subsequent CPAC candidate configuration for the selected cell, or the subsequent CPAC reference configuration (in case the subsequent CPAC candidate configuration does not include scpac-ConfigComplete).  5.3.5.x.6          LTM cell switch execution  1> release the radio bearer(s) and the logical channel(s) that are part of the current UE configuration but not part of the LTM candidate configuration either indicated by lower layers or for the selected cell in accordance with 5.3.7.3, or the LTM reference configuration (in case the LTM candidate configuration does not include ltm-ConfigComplete). |   Thus we think at least, a restriction similar to srb3-ToRelease needs to be captured in the specs so that cconfiguration of  LTM or subsequent CPAC candidates which do not have SRB3 configuration are allowed only over SRB1.  In fact, for the LTM/Subsequent CPAC, even an alternative where UE sends the ReconfigurationComplete over SRB1 e.g. if SRB3 is not present) could be fine, as the ReconfigurationComplete may be send at a different point(s) of time, and thus we are not sure mapping over the same SRB adds any value or not.  So we suggest to discuss this further through t-doc. At least there is a need to capture some restriction in TS 38.331. |
| V120 | vivo-Chenli | Mob | 1 | PropReject | [Ericsson-Tony] The text mentioned by this RIL is legacy text, which has not been impated during the mobility WI. Therefore, we should not change part of text not related to Rel-18 mobility. |  | RACH is only triggered by RRC described above in the case that SRB3 is not configured for SCG LTM or handover for LTM. | In LTM, RACH is only triggered by RRC described above in the case that SRB3 is not configured for SCG LTM or handover case. Thus, the wording “triggered above” is not correct for LTM. The proposed change is to suggest remove “triggered above” |  |
| X122 | Xiaomi (Yi) | Mob | 1 | PropReject | [Ericsson-Tony] Existing text seems to be fine and achieve exactly the same of the text proposed in this RILs. Therefore, no need to re-prashe text in this case. |  | It may be a little confusing what value shall be used and what configuration shall be replaced | replace condExecutionCond or condExectionCondSCG within the entry in VarConditionalReconfig with the matching condReconfigId with the value in condExecutionCondToAddModList. |  |
| V135 | vivo(Jing) | Mob | 1 | PropReject | [OPPO] Disagree, we have not agreed to support unidirectional configuration for SCPAC and it was agreed that the NW will guarantee the validity of SCPAC configuration including execution conditions after each PCell/PSCell change.  [Ericsson-Tony] Tend to agree with OPPO |  | missed handling for unmatched condReconfigId in subsequent CPAC execution | after subsequent CPAC execution, the condExecutionCond (or condExecutionCondSCG) in VarConditionalReconfig should be replaced with the condExecutionCond (or condExecutionCondSCG) in condExecutionCondToAddModList within subsequentCondReconfig if the condReconfigId is matched, however, if it is not matched, the UE will not do any replacement and continute to evaluate the original CPAC configuration which may be wrong because the current PSCell has been changed but the original CPAC configuration can be based on previous PSCells. A contribution R2-24xxxxx will be brought to elaborate this issue. | [ZTE-Mengjie] We have some sympathy with vivo. There may be a case where the number of candidate cells to be evaluated after one subsequent CPAC execution are not equal to the number before this subsequent CPAC execution. For example, there are three candidate cells (e.g. Cell\_1/2/3) configured with execution conditions when the UE is in the source cell. And then when the UE executes one subsequent CPAC to switch to the Cell\_1, there is only one candidate cell (e.g. Cell\_2) configured with execution conditions within the subsequentCondReconfig of the Cell\_1. In this case, the UE can replace the execution conditions for Cell\_2 based on the current procedural text. But regarding the execution conditions for Cell\_1/3, the UE is not required to evaluate them and such execution conditions should be removed (but the current procedural text has not covered this case).  We have not discussed whether the NW always provides the subsequent execution conditions for all prepared candidate cells, or the NW is allowed to provide the subsequent execution conditions for a subset of prepared candidate cells. So it’s suggested to further discuss this issue and see whether some clarification is required. |
| C104 | CATT (Rui) | Mob | 1 | PropReject | [Ericsson-Tony] The existing text has an "or". Therefore, there is no harm in keeping the current text. |  | The procedure should be performed regardless of whether subsequent CPAC was configured | remove “, or subsequent CPAC” 2> if the reconfigurationWithSync was included in spCellConfig of an SCG and the CPA, CPC, or subsequent CPAC was configured: |  |
| O201 | OPPO (Xue) | Mob | 1 | PropReject | [Ericsson-Tony] This was discussed during the WI but no conclusion was reached. Also, it seems that the bullet point "2> release the SCG configuration;" should already cover this aspect. Maybe we are overspecifying here but if the UE release the SCG configuration why it keep SCG-related configurations? |  | Upon SCG release, the entries related to SCG LTM should be removed from UE variables as R18 LTM only focuses on intra-CU scenario. | Add the following text in SCG release section. 2> perform the LTM configuration release procedure for the SCG as specified in clause 5.3.5.18.7; |  |
| Z028 | ZTE (Mengjie) | Mob | 1 | PropAgree |  |  | The current text may cause some ambiguity that the UE shall remove all the following two types of entries: The entries for which the RRCReconfiguration within condRRCReconfig does not include the masterCellGroup with reconfigurationWithSync; The entries for which subsequentCondReconfig is not present. The first type of entries can include both the case that the subsequentCondReconfig is not present (i.e. for legacy CPAC) and the case that the subsequentCondReconfig is present (i.e. for subsequent CPAC). But the intention is to not remove the entries fro subsequent CPAC. | Suggest to combine these two conditions together under one “for which”, e.g.: 3> remove all the entries in the condReconfigList within the MCG VarConditionalReconfig for which subsequentCondReconfig is not present and the RRCReconfiguration within condRRCReconfig does not include the masterCellGroup with reconfigurationWithSync and for which subsequentCondReconfig is not present, if any; |  |
| C105 | CATT (Rui) | Mob | 1 | PropAgree |  |  | The subsequent CPAC case is missing here.If a sk-counter is selected for SCPAC without any RadioBearerConfig with keyToUse set to secondary, UE should also not consider it as invalid. | suggest to change the NOTE 2 as below, NOTE 2: If the UE has no radio bearer configured with keyToUse set to secondary and receives the sk-Counter or a sk-Counter is selected for subseqnent CPAC without any RadioBearerConfig with keyToUse set to secondary, the UE does not consider it as an invalid reconfiguration. |  |
| X123 | Xiaomi (Yi) | Mob | 1 | PropReject | [Ericsson-Tony] My interpretation is that there is only one UE variable in which the security set ID is saved. There should not be a case where two different security set IDs are stored in two different UE variable. In such a case, there is no need to clarify. |  | For the security update of subsequent CPAC, a new UE variable VarServingSecurityCellSetID has been introduced to include the security cell set ID of serving PSCell. For intra-SN subsequent CPAC configured by the conditionalReconfiguration, associated with SCG, the SN key update is not needed and the security set ID and associated sk-counter can not be generated by the SN. Hence, UE only need to maintains one VarServingSecurityCellSetID associated with the MCG conditionalReconfiguration. | Add the clarification for VarServingSecurityCellSetID: UE maintains one VarServingSecurityCellSetID associated with the MCG conditionalReconfiguration. |  |
| X124 | Xiaomi (Yi) | Mob | 1 | PropAgree | [Ericsson-Tony] Makes sense to move the note in the next section. |  | The UE’s behaviours upon the reception of condExecutionCondToReleaseList is included in the section 5.3.5.13.3. | Suggest to move the NOTE 2 to section 5.3.5.13.3. |  |
| E102 | Ericsson (Tony) | Mob | 1 | Duplicate | [Ericsson-Tony] See E102 |  | This NOTE is exactly the same as the previous one. In order to avoid unnecessary repetitions, the two notes can be merged. | Merge the two Notes into one. |  |
| X125 | Xiaomi (Yi) | Mob | 1 | PropReject | [Ericsson-Tony] See comment on X123 |  | For subsequent CPAC, the servingSecurityCellSetId within VarServingSecurityCellSetID is used for the security update in the inter-SN subsequent CPAC. And the security configuration can not be generated by SN and used for SN initiated intra-SN subsequent CPAC in SN format. Hence, the case in the note should be that all subsequent CPAC configuration stored in MCG VarConditionalReconfig are released. | The UE should release the entry within VarServingSecurityCellSetID in case all the subsequent CPAC configurations stored in MCG VarConditionalReconfig are released. |  |
| C106 | CATT (Rui) | Mob | 1 | PropReject | [Ericsson-Tony] The note is right below the handling of the security set ID. Therefore, it makes sense to keep the note where it is. |  | The NOTE should not be in this section.The NOTE is about configuration release, it is not relevant to the section about Conditional reconfiguration addition/modification. | move this NOTE to section 5.3.5.13.1 |  |
| C107 | CATT (Rui) | Mob | 1 | PropReject | [Ericsson-Tony] The storing of the scpac-ConfigComplete is already done when the UE store the configuration related to the condReconfigID received for subsequent CPAC. Therefore, no need to speficy more. |  | the handling for the IE scpac-ConfigComplete-r18 is missing. | add a new bullet 2> to handle the IE scpac-ConfigComplete-r18 2> if the entry in condReconfigToAddModList includes an scpac-ConfigComplete-r18 3> store scpac-ConfigComplete-r18 in VarConditionalReconfig; 2> else 3> remove the stored scpac-ConfigComplete-r18 in VarConditionalReconfig if present; |  |
| X126 | Xiaomi (Yi) | Mob | 1 | PropReject | [Ericsson-Tony] The suggestion seems straightforward and there is no need to overclarify |  | For CHO with candidate SCG(s), there are two applicable cells and two conditions. In current wording, it is unclear which applicable cells are used to evaluate which conditions. Suggest to clarify the applicable cell is used for which conditions. | 4> consider the cell which has a physical cell identity matching the value indicated in the ServingCellConfigCommon included in the reconfigurationWithSync within the masterCellGroup in the received condRRCReconfig to be applicable cell for each measId indicated in the condExecutionCond; and 4> consider the cell which has a physical cell identity matching the value indicated in the ServingCellConfigCommon included in the reconfigurationWithSync within the secondaryCellGroup within the nr-SCG within the received condRRCReconfig to be applicable cell for each measId indicated in the condExecutionCondPSCell; |  |
| C123 | CATT (Rui) | Mob | 1 | Disc | [Ericsson-Tony] | CATT (to coordinate with the other companies) | For MN-initiated subsequent CPAC, both condRRCReconfig and condExecutionCondSCG can be present for one candidate cell in MCG VarConditionalReconfig. Only one of them should evaluated during the subsequent CPAC But according to the current spec, the UE will evaluate both the condRRCReconfig and condExecutionCondSCG if both are present, which is not intended. | UE should only performs the evaluation to the the valid execution condition evaluation when there are two execution conditions maintained for one candidate cell in MCG VarConditionalReconfig. We’d submit a tdoc on how to address this issue |  |
| C108 | CATT (Rui) | Mob | 1 | PropReject | [Ericsson-Tony] I would disagree with the change as the RNTI is used also in case of re-establishment.  [QC] Disagree. The proposed change is not needed, since the network may provide a reference MCG and a delta MCG configuration with respect to it, or a complete MCG configuration. In either case, UE forms a complete MCG configuration, and applies the procedure to handle a complete MCG configuration. |  | The MCG related configuration should not be released upone SCPAC execution.Only the dedicated radio configuration associated SCG can be released. | 2> release/clear all current dedicated radio configuration associated with SCG except for the following: - the MCG C-RNTI; - the AS security configurations associated with the master key and the secondary key; - for each SRB/DRB in current UE configuration: - keep the associated RLC, PDCP and SDAP entities, their state variables, buffers and timers; - release all fields related to the SRB/DRB configuration except for srb-Identity and drb-Identity; - the UE variables VarConditionalReconfig and VarServingSecurityCellSetID. |  |
| C109 | CATT (Rui) | Mob | 1 | Disc | [Ericsson-Tony] It seems that CATT raised the issue but QC has a different understanding.  [QC v125] Disagree. The defined procedure seems to be wrong. We have a proposed change to handle the scenario, see Q534. | CATT (to coordinate with the other companies) | The timers at MCG side should not be affected upon SCPAC execution. | 1> use the default values specified in 9.2.3 for timers at SCG side T310, T311 and constants N310, N311 for the cell group for which the subsequent CPAC cell switch procedure is triggered; |  |
| Q534 | QC (Umesh) | Mob | 1 | Duplicate | [Ericsson-Tony] See C109. Please, coordinate with CATT and bring a tdoc only if you diagree with CATT proposal/understanding.  [OPPO]: Agree with the proposed change by QC. |  | Depending upon whether the the selected subsequent CPAC candidate configuration is stored in MCG or the SCG VarConditionalReconfig, there can be two cases: Case 1 - The default values for timers T310, T311 and constants N310, N311, are used for the MCG and the SCG, Case 2 - default values for timers T310, T311 and constants N310, N311, are used for the SCG only. | Removing this statement from here and add separate statements for the two cases in earlier bullets (as shown below): 1> if the selected subsequent CPAC candidate configuration is stored in MCG VarConditionalReconfig: 2> release/clear all current dedicated radio configuration except for the following: - the MCG C-RNTI; - the AS security configurations associated with the master key and the secondary key; - for each SRB/DRB in current UE configuration: - keep the associated RLC, PDCP and SDAP entities, their state variables, buffers and timers; - release all fields related to the SRB/DRB configuration except for srb-Identity and drb-Identity; - the UE variables VarConditionalReconfig and VarServingSecurityCellSetID. 2> release/clear all current common radio configuration; 2> use the default values specified in 9.2.3 for timers T310, T311 and constants N310, N311, for the MCG and the SCG. 1> else: 2> release/clear all current dedicated radio configuration associated with the SCG except for the following: - the AS security configurations associated with the secondary key; - for each SRB/DRB in current UE configuration which is using the secondary key: - keep the associated RLC, PDCP and SDAP entities, their state variables, buffers and timers; - release all fields related to the SRB/DRB configuration except for srb-Identity and drb-Identity; - the UE variables VarConditionalReconfig. 2> release/clear all current common radio configuration associated with the SCG; 2> use the default values specified in 9.2.3 for timers T310, T311 and constants N310, N311, for the SCG. 1> use the default values specified in 9.2.3 for timers T310, T311 and constants N310, N311 for the cell group for which the subsequent CPAC cell switch procedure is triggered; |  |
| Z029 | ZTE (Mengjie) | Mob | 1 | PropAgree | [Ericsson-Tony] Maybe we can align this to the name of the section -> Subsequent CPAC execution |  | There is no definition for “the subsequent CPAC cell switch procedure”, so it’s suggested to change it to “the conditional reconfiguration execution for subsequent CPAC” to align the text in this section. | 1> use the default values specified in 9.2.3 for timers T310, T311 and constants N310, N311 for the cell group for which the subsequent CPAC cell switch procedure the conditional reconfiguration execution for subsequent CPAC is triggered; |  |
| E103 | Ericsson (Tony) | Mob | 2 | PropAgree | [OPPO v156]: Agree with the proposed change by Ericsson |  | The MAC is reset in the reconfiguration with sync but we need a statement where the MAC entity is initiated according to the | Add the following sentence: X> apply the default MAC Cell Group configuration as specified in 9.2.2; |  |
| W003 | NEC (Da WANG) | Mob | 1 | Duplicate | [Ericsson-Tony] This is related to the existing editor's issue. See E072 |  | the RB of current UE configuration may be not the same as the configuration after applying candidate configuration and may be released later (by the last sentence of this procedure). | Propose to adopt the same handling as the L2 reset handling in LTM cell switch execution, i.e., add "after the end of this procedure": 3> after the end of this procedure, trigger the PDCP entity of the AM DRB to perform PDCP data recovery as specified in TS 38.323 [5]; 3> after the end of this procedure, re-establish the corresponding RLC entity as specified in TS 38.322 [4]; |  |
| E072 | Ericsson (Tony) | Mob | 2 | Disc | [Ericsson-Tony] | No RIL source companies. All companies can contribute because this is outside of the ASN.1 reivew. | It is still unclear how the L2 reset is indicated in case of CPAC. The understanding is that either the LTM approach or re-using the legacy PDCP and RLC re-establishment flag can be used. This RIL is just for bookkeeping and the understanding is that this will be discussed based on companies’ contributions. | To discuss how L2 reset is indicated in case of CPAC based on companies’ contributions. |  |
| W004 | NEC (Da WANG) | Mob | 1 | Duplicate | [Ericsson-Tony] This is related to the existing editor's issue. See E072 |  | the RB of current UE configuration may be not the same as the configuration after applying candidate configuration and may be released later (by the last sentence of this procedure). | adopt the same handling as the L2 reset handling in LTM cell switch execution, i.e., add "after the end of this procedure": 3> if a different keyToUse value is configured; or 3> if a new sk-Counter value has been selected due to the conditional reconfiguration execution for subsequent CPAC: 4> after the end fo this procedure, trigger the PDCP entity of the bearer to perform PDCP reestablishment as specified in TS 38.323 [5]; 3> else: 4> after the end fo this procedure, trigger the PDCP entity of the AM DRB to perform PDCP data recovery as specified in TS 38.323 [5]; 4> after the end fo this procedure, re-establish the corresponding RLC entity as specified in TS 38.322 [4]; |  |
| W005 | NEC (Da WANG) | Mob | 1 | Duplicate | [Ericsson-Tony] This is related to the existing editor's issue. See E072 |  | in case of new sk-counter selected, there is no need to perform PDCP reestablishment for all RBs of the current UE configuration, but only for SN-terminated RBs. Will submit tdoc on the exact text change. | for the case of new sk-counter selected, perform PDCP reestablishment only for SN-terminated RBs. |  |
| W006 | NEC (Da WANG) | Mob | 1 | Duplicate | [Ericsson-Tony] This is related to the existing editor's issue. See E072 |  | missing integrity/cipher algorithm and integrity/ciphering key update for the PDCP entityt. Will submit tdoc on the exact text change. | Same as the UE behaviour upon reception of reestablishPDCP IE specified in 5.3.5.6.3 and 5.3.5.6.5, the integrity/cipher algorithm and integrity/ciphering key for the PDCP entity should be updated before triggering PDCP re-establishment. |  |
| C110 | CATT (Rui) | Mob | 1 | Duplicate | [Ericsson-Tony] This is related to the existing editor's issue. See E072 |  | “re-establish the corresponding RLC entity” should be applied for al the cases | change the indent from 4> to 3> 3> re-establish the corresponding RLC entity as specified in TS 38.322 [4]; |  |
| S793 | Samsung (Aby) | Mob | 1 | PropAgree | [Ericsson-Tony] Make sense to clarify that is up to UE to build a complete configuration which is always in line with the latest reference configuration received. |  | When the Reference configuration is modified, UE also should regenerate any stored RRC reconfiguration message using the modified reference configuration message. Though it is theoretically possible for the network to provide candidate configuration such that the final generated RRCReconfiguration with the new reference configuration is same, it doesnt practically work as the UE is allowed to generate and store the complete RRCReconfiguration any time before SCPAC execution (impact of Note2 below). | Add the following sentence at the end of this NOTE 2. NOTE 2: When scpac-ConfigComplete is not included for the selected cell, before a subsequent CPAC execution, a UE implementation may generate and store an RRC reconfiguration message by applying the received subsequent CPAC candidate configuration on top of the subsequent CPAC reference configuration, and the stored RRC reconfiguration message is applied for subsequent CPAC execution. The UE need to ensure that RRC reconfiguration applied at the time of subsequent CPAC execution in in accordance with the latest scpac-ReferenceConfiguration and condRRCReconfig for the subsequent CPAC configuration. |  |
| H016 | Huawei (David Lecompte) | Mob | 1 | PropAgree |  |  | Should say the field name | 2> remove the entry related to LTM-Candidate from ltm-candidateList in VarLTM-Config. |  |
| H017 | Huawei (David Lecompte) | Mob | 1 | PropAgree |  |  | Should say the field name | 2> if the ltm-CandidateList in current VarLTM-Config includes an LTM-Candidate with the ltm-CandidateId value: 3> replace the LTM-Candidate in the ltm-CandidateList within VarLTM-Config in accordance with the received LTM-Candidate; 2> else: 3> add the received LTM-Candidate to the ltm-CandidateList in VarLTM-Config; In the two 3> bullets, "in VarLTM-Config" is not absolutely necessary because "the ltm-CandidateList" refers to the 2> bullet before. |  |
| Z050 | ZTE (FeiDong) | Mob | 1 | Duplicate | [Ericsson-Tony] See H018. This issue was already raised by HW. |  | In the current subclause 5.3.5.18.3, LTM candidate configuration addition/modification procedure which is started with the following text: The UE shall: 1> for each ltm-CandidateId value in the ltm-CandidateToAddModList: 2> if the current VarLTM-Config includes an LTM-Candidate with the ltm-CandidateId value: 3> replace the LTM-Candidate within VarLTM-Config in accordance with the received LTM-Candidate; 2> else: 3> add the received LTM-Candidate to VarLTM-Config; In the green highlighted wording, the modification of LTM candidate is handled by the whole replacing of the LTM-candidate within VarLTM-Config However, the UE operation regarding the addModList/Releaselist for the modification of LTM-Candidate is also followed by above procedures which is definitely redundant operation. | One contribution is going to be prepared for Ran2#125 meeting. |  |
| H018 | Huawei (David Lecompte) | Mob | 1 | Disc | [MediaTek] (Li-Chuan Tseng) – v133 (M012): Clause 5.3.5.18.3 first instruct to store received LTM-Candidate to VarLTM-Config. However, after that, the clause contains explicit handling of each ToReleaseList and each ToAddModList within received LTM-Candidate. Because of this, the current text should not instruct the UE to store the ToReleaseList's and ToAddModList's. Proposed Change: 1> for each ltm-CandidateId value in the ltm-CandidateToAddModList: 2> if the current VarLTM-Config includes an LTM-Candidate with the ltm-CandidateId value: 3> replace the LTM-Candidate within VarLTM-Config in accordance with the received LTM-Candidate, except any ToAddModList or ToReleaseList within LTM-Candidate; 2> else: 3> add the received LTM-Candidate, except any ToAddModList or ToReleaseList within LTM-Candidate, to VarLTM-Config; | Huawei (to coordinate with the other interested companies). | Unclear action and unclear field. | In English, "replace X with Y" means discard X, as if it was never there, and take Y, and "replace X in accordance with Y" does not exist. Assuming this is just an English mistake, the text means to clear every field previously stored, e.g.PCI, configuration, early UL sync configuration, TCI states, CSI-RS resources, pathlossRS, etc. The intention of the Need codes is probably to do something else, but Need codes are not applicable to UE variables, so "reconfigure" cannot be used. In addition, UE variables should not include ToReleaseList or ToAddModList because these fields are not supposed to be stored. We will provide a TP (possibly with some alternatives) with a proper definition of UE variables and updated procedure text. |  |
| M013 | MediaTek (Li-Chuan Tseng) | Mob | 1 | PropAgree |  |  | The entry of ltm-UL-TCIStatesToReleaseList does not contain field named as tci-StateId. The entry itself is a TCI UL state ID (of type TCI-UL-StateId). | 2> if the received LTM-Candidate includes ltm-UL-TCI-StatesToReleaseList: 3> for each TCI-UL-StateIdtci-StateId in the ltm-UL-TCI-StatesToReleaseList: 4> if the current VarLTM-Config includes an CandidateTCI-UL-State within an LTM-Candidate with the ltm-CandidateId value that is associated with the TCI-UL-StateIdtci-StateId value: 5> remove the entry related to CandidateTCI-UL-State within the LTM-Candidate from VarLTM-Config. |  |
| M014 | MediaTek (Li-Chuan Tseng) | Mob | 1 | PropAgree |  |  | There is no field tci-StateId in CandidateTCI-UL-State. The correct field name is tci-UL-StateId. | 2> if the received LTM-Candidate includes ltm-UL-TCI-StatesToAddModList: 3> for each tci-UL-StateId in the ltm-UL-TCI-StatesToAddModList: 4> if the current VarLTM-Config includes an CandidateTCI-UL-State within an LTM-Candidate with the ltm-CandidateId value that is associated with the tci-UL-StateId value: |  |
| C111 | CATT (Rui) | Mob | 1 | PropAgree | [MediaTek] (Li-Chuan Tseng) – v133 (M015): Agreed |  | “ltm-nzp-CSI-RS-ResourceToReleaseList” should not be referred here.it should be ltm-nzp-CSI-RS-ResourceToAddModList | 3> for each nzp-CSI-RS-ResourceId in the ltm-nzp-CSI-RS-ResourceToReleaseList ltm-nzp-CSI-RS-ResourceToAddModList |  |
| C112 | CATT (Rui) | Mob | 1 | PropAgree | [MediaTek] (Li-Chuan Tseng) – v133 (M015): Agreed |  | “ltm-nzp-CSI-RS-ResourceSetToReleaseList” should not be referred here.it should be ltm-nzp-CSI-RS-ResourceSetToAddModList. | 3> for each nzp-CSI-RS-ResourceSetId in the ltm-nzp-CSI-RS-ResourceSetToReleaseList ltm-nzp-CSI-RS-ResourceSetToAddModList. |  |
| Z051 | ZTE (Fei Dong) | Mob | 1 | Duplicate | [Ericsson-Tony] See C113 |  | For UE based TA measurement, we have the following agreements in RAN2#124 meeting: The UE performs TA measurements for candidate cell(s) after configured by RRC R2 assumes that the exact time the UE performs TA measurement is up to UE impl (no need to specify in R2 TS) According to the agreements, there is no need to specify anything about the timing point of UE based TA measurement, however, in the subclause 5.3.5.18.3, the following behavior regarding the UE based TA measurement has been defined: 2> if the LTM-Candidate with the received ltm-CandidateId value includes ltm-UE-MeasuredTA-ID: 3> if the value of ltm-UE-MeasuredTA-ID is equal to the value of ltm-ServingCellUE-MeasuredTA-ID within VarLTM-ServingCellUE-MeasuredTA-ID: 4> inform lower layers that UE is configured with UE-based TA measurements if an LTM cell switch is executed for this LTM candidate configuration; The yellow highlighted wording implies the timing point of UE based TA measurement shall be in the execution of LTM Cell switch. In addition, the above Text procedure part is not suitable to be in the subclause 5.3.5.18.3 where the UE variable handling for LTM candidate modification/addition is defined. In this sense, we think this part of text procedure shall be removed from specification, And the usage of ltm-UE-MeasuredTA-ID can be defined in its field description. | remove these sentences, 2> if the LTM-Candidate with the received ltm-CandidateId value includes ltm-UE-MeasuredTA-ID: 3> if the value of ltm-UE-MeasuredTA-ID is equal to the value of ltm-ServingCellUE-MeasuredTA-ID within VarLTM-ServingCellUE-MeasuredTA-ID: 4> inform lower layers that UE is configured with UE-based TA measurements if an LTM cell switch is executed for this LTM candidate configuration; And add the following description in the field description of ltm-UE-MeasureTA-Id: The UE based TA measurement for the LTM candidate cell is allowed if the value of this field is equal to the value of the ltm-ServingCellUE-MeasuredTA-ID within the current VarLTM-ServingCellUE-MeasuredTA-ID. [Comments]: |  |
| C113 | CATT (Rui) | Mob | 1 | Disc | [Ericsson-Tony] I will try to address this in a separate tdoc submitted to the meeting by taking into account the comments from the companies which span also to sectiions that this RIL does not mention.  LGE (Siyoung): I think this is right place to perform UE-based TA measurment. Since UE-based TA measurement can be performed by UE implementation before LTM cell switch execution, RRC needs to inform lower layers of candidate cells whose value of ltm-UE-MeasuredTA-ID is the same as the value of ltm-ServingCellUE-MeasuredTA-ID. Further, since the value of ltm-ServingCellUE-MeasuredTA-ID can be changed due to LTM cell switch, the indication to lower layers for UE-based TA measurement is also needed at LTM cell switch execution (see RIL# L005). In summary, the indication to lower layers for UE-based TA measurement should be specified in both 5.3.5.18.3 (i.e. here) and 5.3.5.18.6 (i.e. RIL# L005). CATT(Rui):agree with the comments from LGE, the indication to lower layers for UE-based TA measurement should be specified in both 5.3.5.18.3 (i.e. here) and 5.3.5.18. | Ericsson (since there are multiple companies that raised concerns on the UE-based TA acquisition procedure and in different parts of the specifications, my plan is to address this topic in a separate contribution and provide a complete specification - i.e., is good to have a general overview about this). Will try to share this with companies ASAP so everybody can contribute and provide feedbacks. | This is the wrong(the only place) place to perfom the UE based TA measurement handling.it is should not be performed when UE handles LTM candidate configuration addition/modification.it should also be perform upon each LTM execution(i.e., in section 5.3.5.18.6) | remove it from this section and add it in section 5.3.5.18.6 2> if the LTM-Candidate with the received ltm-CandidateId value includes ltm-UE-MeasuredTA-ID: 3> if the value of ltm-UE-MeasuredTA-ID is equal to the value of ltm-ServingCellUE-MeasuredTA-ID within VarLTM-ServingCellUE-MeasuredTA-ID: 4> inform lower layers that UE is configured with UE-based TA measurements if an LTM cell switch is executed for this LTM candidate configuration; | ZTE-Fei: [Z051] raise the same issue, and give another alternative to resolve the issue, that is, remove the text procedure, in subclause 5.3.5.18.3, regarding the UE based TA measurement, for example:  ~~2> if the~~ *~~LTM-Candidate~~* ~~with the received~~ *~~ltm-CandidateId~~* ~~value includes~~ *~~ltm-UE-MeasuredTA-ID~~*~~:~~  ~~3> if the value of~~ *~~ltm-UE-MeasuredTA-ID~~* ~~is equal to the value of~~ *~~ltm-ServingCellUE-MeasuredTA-ID~~* ~~within~~ *~~VarLTM-ServingCellUE-MeasuredTA-ID~~*~~:~~  ~~4> inform lower layers that UE is configured with UE-based TA measurements if an LTM cell switch is executed for this LTM candidate configuration;~~  And add the following description in the field description of ltm-UE-MeasureTA-Id:  “The UE based TA measurement for the LTM candidate cell is allowed if the value of this field is equal to the value of the ltm-ServingCellUE-MeasuredTA-ID within the current VarLTM-ServingCellUE-MeasuredTA-ID.”  In our understanding, considering it is up to UE implementation for UE to determine when to perform UE based TA measurement, it is better to capture how to use the *ltm-UE-MeasureTA-Id* in its field description rather than in text procedure. |
| B105 | Lenovo(Lianhai) | Mob | 1 | Duplicate | [Ericsson-Tony] See C113 |  | UE determines whether UE-MeasuredTA-ID from candidate cell is same as serving cell only when UE is triggered to execute LTM. However, the section 5.3.5.18.3 is related to ‘LTM candidate configuration addition/modification’. Therefore, this part can be moved to 5.3.5.18.6 | UE determines whether UE-MeasuredTA-ID from candidate cell is same as serving cell in 5.3.5.18.3 should be moved to 5.3.5.18.6 LTM cell switch execution. |  |
| B202 | Lenovo (Prateek) | Mob | 1 | Duplicate | [Ericsson-Tony] See C113 |  | We also need to have something for the case where the value of ltm-UE-MeasuredTA-ID is NOT equal to the value of ltm-ServingCellUE-MeasuredTA-ID. | The lower layers need to be informed for UE based TA determination for the LTM-Candidate, like in the following: 2> if the LTM-Candidate with the received ltm-CandidateId value includes ltm-UE-MeasuredTA-ID: 3> if the value of ltm-UE-MeasuredTA-ID is equal to the value of ltm-ServingCellUE-MeasuredTA-ID within VarLTM-ServingCellUE-MeasuredTA-ID: 4> inform lower layers that UE is configured with UE-based TA measurements if an LTM cell switch is executed for this LTM candidate configuration; 3> else: 4> inform lower layers to determine UE-based TA measurements for this LTM candidate configuration; |  |
| C114 | CATT (Rui) | Mob | 1 | Duplicate | [Ericsson-Tony] See C113  [Huawei] "if" is not correct but the proposal is also not correct because the information on the LTM candidate configuration need to be provided. Alternative proposal: change "if" to "in case" |  | UE based TA measurement can be performed by lower layers regardless of whether LTM cell switch is executed,e.g., UE based TA measurement can be performed before LTM execution. So the condition “if an LTM cell switch is executed for this LTM candidate configuration” should not be removed. | remove “if an LTM cell switch is executed for this LTM candidate configuration” 4> inform lower layers that UE is configured with UE-based TA measurements if an LTM cell switch is executed for this LTM candidate configuration; |  |
| M002 | MediaTek (Li-Chuan Tseng) | Mob | 1 | Duplicate | [Ericsson-Tony] See C113 |  | The following UE behavior description is imprecise: "4> inform lower layers that UE is configured with UE-based TA measurements if an LTM cell switch is executed for this LTM candidate configuration;" - We have agreed that the exact time the UE performs UE-based TA measurement is up to UE implementation, so we should not say explicitly "if an LTM cell switch is executed". - Also, UE is "configured" for UE based TA measurement if ltm-UE-MeasuredTA-ID presents. The UE behavior is about whether UE can really perfom UE-based TA measurement for the candidate (i.e. based on the IDs). - The ";" at the end of sentence should be replaced with "." - Note: When serving cell changes, the feasibility of UE-based TA measurement may also change. We may need some text in 5.3.5.18.6 to reflect this. | Change to "4> inform lower layers that UE is configured with able to perform UE-based TA measurements if an LTM cell switch is executed for this LTM candidate configuration;." |  |
| B106 | Lenovo(Lianhai) | Mob | 1 | PropAgree | [Ericsson-Tony] I will address this together with the issue raised by C113 and all the other related RILs |  | In RAN2#123 meeting, it was agreed that ‘If selected cell is an LTM candidate cell, UE performs RACH-based LTM cell switch on the selected cell (network-controlled)’. But at that time i.e. RAN2#123, RAN1 has not confirmed to support UE based TA measurement. Therefore, RAN2 needs to discuss whether UE based TA measurement can be supported in LTM based recovery. If not supported, this sentence should be updated to limit to the case triggered by LTM cell switching command. | RAN2 needs to discuss whether UE based TA measurement can be supported in LTM based recovery. If not supported, UE based TA measurement should be restricted to the case triggered by LTM cell switching command as follows. 5.3.5.18.3 4> inform lower layers that UE is configured with UE-based TA measurements if an LTM cell switch is executed for this LTM candidate configuration triggered by an indication from lower layers; |  |
| O202 | OPPO (Xue) | Mob | 1 | PropAgree | [Ericsson-Tony] The TP seems related to the a different section, but I got the point. Will address this. |  | It was agreed that an LTM cell switch procedure should not be triggered while an MCG failure recovery procedure is ongoing. Current LTM execution procedure does not check whether there is an ongoing MCG failure recovery procedure. | UE shall check the status of T316 before LTM execution. An TP is provided as follows: The UE shall perform the following actions upon reception of the RRCReconfiguration while T316 is not running, upon execution of the conditional reconfiguration (CHO, CPA or CPC), or upon execution of an LTM cell switch: | [ZTE-Mengjie] Not sure if the check on T316 is really needed. If T316 is running, the UE shall suspend the MCG transmission. So the MN shall never trigger the MCG LTM in this case.  Regarding the case that the SN triggers the SCG LTM during T316 is running, the UE shall trigger the RRC re-establishment procedure according to the current text in section 5.3.7.2 (1> upon detecting radio link failure of the MCG while PSCell change or PSCell addition is ongoing, in accordance with 5.3.10;). It’s assumed that the SCG LTM can be covered by the case “PSCell change or PSCell addition is ongoing”.  Besides, this issue is also related to RIL B100 (whether SCG LTM can be triggered during T316 is running), which is proposed to be further discussed. We think this RIL can be discussed together. |
| H019 | Huawei (David Lecompte) | Mob | 1 | PropAgree |  |  | SRBs and DRBs are not associated with any cell group. | A bullet such as "1> release/clear all current dedicated radio configuration associated with the cell group for which the LTM cell switch procedure is triggered except for the following:" should have sub-bullets that only specify exceptions but SRBs/DRBs are not associated with any CG, so they are concerned by this bullet and any action on SRBs/DRBs should be specified not as a sub-bullet of this bullet. 1> release/clear all current dedicated radio configuration associated with the cell group for which the LTM cell switch procedure is triggered except for the following: - the logicalChannelIdentity and logicalChannelIdentityExt of RLC bearers configured in RLC-BearerConfig and the associated RLC entities, their state variables, buffers, and timers; - the UE variables VarLTM-Config, VarLTM-ServingCellNoResetID, and VarLTM-ServingCellUE-MeasuredTA-ID. 2> if the LTM cell switch is triggered on the MCG: - the MCG C-RNTI; - the AS security configurations associated with the master key; - for each SRB/DRB in current UE configuration which is using the master key: - keep the associated PDCP and SDAP entities, their state variables, buffers and timers; - release all fields related to the SRB/DRB configuration except for srb-Identity and drb-Identity; 2> else, if the LTM cell switch is triggered on the SCG: - the AS security configurations associated with the secondary key; - for each SRB/DRB in current UE configuration which is using the secondary key: - keep the associated PDCP and SDAP entities, their state variables, buffers and timers; - release all fields related to the SRB/DRB configuration except for srb-Identity and drb-Identity; 1> for each SRB and for each DRB in the current UE configuration: 2> if LTM is executed for the MCG and the SRB/DRB is using the master key; or 2> if LTM is executed for the SCG and the SRB/DRB is using the secondary key: 2> keep the associated PDCP and SDAP entities, their state variables, buffers and timers; 2> release he SRB or DRB configuration except for srb-Identity or drb-Identity; In English, "replace X with Y" means discard X, as if it was never there, and take Y, and "replace X in accordance with Y" does not exist. Assuming this is just an English mistake, the text means to clear every field previously stored, e.g.PCI, configuration, early UL sync configuration, TCI states, CSI-RS resources, pathlossRS, etc. The intention of the Need codes is probably to do something else, but Need codes are not applicable to UE variables. In addition, UE variables should not include ToReleaseList or ToAddModList because these fields are not supposed to be stored. We will provide a TP (possibly with some alternatives) with a proper definition of UE variables and updated procedure text. |  |
| E067 | Ericsson (Tony) | Mob | 1 | PropAgree | [Ericsson-Tony] It seems that the RLC entity should not be released, unless the L2 reset is indicated by the network. |  | At this point of the LTM execution procedure, the UE should also keep the RLC entity, because the RLC may not be re-establishment later on. | Added the following change: - keep the associated RLC, PDCP and SDAP entities, their state variables, buffers and timers; |  |
| E067 | Ericsson (Tony) | Mob | 1 | PropAgree | [Ericsson-Tony] It seems that the RLC entity should not be released, unless the L2 reset is indicated by the network. |  | At this point of the LTM execution procedure, the UE should also keep the RLC entity, because the RLC may not be re-establishment later on. | Added the following change: - keep the associated RLC, PDCP and SDAP entities, their state variables, buffers and timers; |  |
| E065 | Ericsson (Tony) | Mob | 2 | PropAgree | [Ericsson-Tony] I guess there is no need for a separate contribution. I will try to address this in my rapporteur CR. |  | Upon an LTM cell switch, the UE clears all the field associated with SRBs and DRBs. However, for the SRBs, at lest the SRB1 should be configured with defaults values to avoid any problem (similar to what we do in the full configuration procedure). | Add a UE action for the UE to apply the default SRB configuration defined in 9.2.1 for each srb-Indentity which has not been released. We are planning to submit a contribution about this. |  |
| E066 | Ericsson (Tony) | Mob | 2 | PropAgree | [Ericsson-Tony] I guess there is no need for a separate contribution. I will try to address this in my rapporteur CR. |  | When executing the reconfigurationWithSync procedure (when 5.3.5.3 is called at the end of this section), the MAC entity is reset. However, there is no action for the UE to apply the default MAC Cell Group configuration as specified in 9.2.2; | Add a UE actions so that UE applies the default MAC Cell Group configuration as specified in 9.2.2; We are planning to submit a contribution about this. |  |
| H020 | Huawei (David Lecompte) | Mob | 1 | Disc |  | Huawei (to coordinate with the other interested companies). | Not for SRBs. | For SRB1, no PDCP data recovery is performed and in most cases, there will be a discardOnPDCP flag used, so it would make sense to rely on legacy flags for logical channels for SRBs. We also need to change the field description for reestablishRLC in RLC-BearerConfig. We will have a TP for this. |  |
| Z052 | ZTE (Fei Dong) | Mob | 1 | PropReject | [Ericsson-Tony] I guess that current text is not wrong as it specify exactly after which action the UE should re-establish the RLC entity. It does not hurt to be specific in this case.  NEC (Da WANG) – agree to remove “after applying … in VarLTM-Config” and think the same way is applied below (as in W007) |  | In the text procedure of subclause 5.3.5.18.6, there are following description: 1> if the value of field ltm-NoResetID contained within the LTM-Candidate IE in VarLTM-Config indicated by lower layers or for the selected cell in accordance with 5.3.7.3 is not equal to the value of ltm-ServingCellNoResetID within VarLTM-ServingCellNoResetID: 2> for each logicalChannelId and logicalChannelIdExt that is part of the current UE configuration for the cell group for which the LTM cell switch procedure is triggered: 3> after the end of this procedure, re-establish the corresponding RLC entity as specified in TS 38.322 [4], after applying the LTM configuration in ltm-CandidateConfig within LTM-Candidate IE in VarLTM-Config; 2> for each drb-Identity value that is part of the current UE configuration: 3> if this DRB is an AM DRB: 4> after the end of this procedure, trigger the PDCP entity of this DRB to perform data recovery as specified in TS 38.323 [5], after applying the LTM configuration in ltm-CandidateConfig within LTM-Candidate IE in VarLTM-Config; The yellow highlighted wording are redundant with each other since this procedure have included the applying the LTM configuration, please see the below wording from the text procedure: 1> if the LTM cell switch is triggered by an indication from lower layers: 2> apply the RRCReconfiguration message in ltm-CandidateConfig within LTM-Candidate IE in VarLTM-Config identified by the LTM candidate configuration identity received from lower layers according to clause 5.3.5.3; 1> else (LTM cell switch triggered upon cell selection performed while timer T311 was running): 2> apply the RRCReconfiguration message in ltm-CandidateConfig within LTM-Candidate IE in VarLTM-Config related to the LTM candidate configuration identity for the selected cell (i.e., in accordance with 5.3.7.3) according to clause 5.3.5.3; | Removing the sentence ‘after applying the LTM configuration in ltm-CandidateConfig within LTM-Candidate IE in VarLTM-Config’ in the text procedure of subclause 5.3.5.18.6 3> after the end of this procedure, re-establish the corresponding RLC entity as specified in TS 38.322 [4], after applying the LTM configuration in ltm-CandidateConfig within LTM-Candidate IE in VarLTM-Config; | ZTE-Fei: I think it may make the UE behavior unclear about when to re-establish RLC entity since there are two different timing pointings for UE to start the RLC entity re-establishment:  Timing 1: After the end of this procedure.  Timing 2: After applying the LTM configuration in *ltm-CandidateConfig* within *LTM-Candidate IE* in *VarLTM-Config*  In my understanding, the timing 2 is a little bit earlier than a timing 1 since the procedure is still ongoing at timing 2 and procedure have been terminated at timing 1. |
| W007 | NEC (Da WANG) | Mob | 1 | Duplicate | [Ericsson-Tony] See Z052 |  | “after the end of this procedure” and “after applying the LTM configuration …” point to different places. | Remove “after applying the LTM configuration in ltm-CandidateConfig within LTM-Candidate IE in VarLTM-Config “ in the sentence. |  |
| C115 | CATT (Rui) | Mob | 1 | Duplicate | [Ericsson-Tony] Will address this together with C113 |  | UE handling is missing for one case (i.e., the field ltm-UE-MeasuredTA-ID is not included in the candidate configuration) | add the UE behaviour for this case, 1> if the LTM-Candidate IE in VarLTM-Config indicated by lower layers or for the selected cell in accordance with 5.3.7.3 contains the field ltm-UE-MeasuredTA-ID: 2> replace the value of ltm-ServingCellUE-MeasuredTA-ID in VarLTM-ServingCellUE-MeasuredTA-ID with the value received within ltm-UE-MeasuredTA-ID; else 2> remove the entry ltm-ServingCellUE-MeasuredTA-ID from VarLTM-ServingCellUE-MeasuredTA-ID; |  |
| L005 | LGE (Siyoung Choi) | Mob | 1 | Duplicate | [Ericsson-Tony] Will address this together with C113 |  | Since UE-based TA measurement can be performed before LTM cell switch execution by UE implementation, the information for UE-based TA measurement based on the updated ltm-ServingCellUE-MeasuredTA-ID should be provided to lower layers when ltm-ServingCellUE-MeasuredTA-ID is changed by LTM cell switch execution. Then, the UE implementation can perform UE-based TA measurement based the updated ltm-ServingCellUE-MeasuredTA-ID prior to an LTM cell switch execution to the candidate cell whose value of ltm-UE-MeasuredTA-ID is the same as the updated ltm-ServingCellUE-MeasuredTA-ID. | 1> if the value of field ltm-UE-MeasuredTA-ID contained within the LTM-Candidate IE in VarLTM-Config indicated by lower layers or for the selected cell in accordance with 5.3.7.3 is not equal to the value of ltm-ServingCellUE-MeasuredTA-ID within VarLTM-ServingCellUE-MeasuredTA-ID: 2> replace the value of ltm-ServingCellUE-MeasuredTA-ID in VarLTM-ServingCellUE-MeasuredTA-ID with the value received within ltm-UE-MeasuredTA-ID; 2> for each LTM-Candidate IE in VarLTM-Config, 3> if the value of ltm-UE-MeasuredTA-ID is equal to the value of ltm-ServingCellUE-MeasuredTA-ID within VarLTM-ServingCellUE-MeasuredTA-ID: 4> inform lower layers that UE is configured with UE-based TA measurements |  |
| Z030 | ZTE (Mengjie) | Mob | 1 | Duplicate | [Ericsson-Tony] Will address this together with C113 |  | The UE is required to replace the value only when the value of field ltm-UE-MeasuredTA-ID contained within the LTM-Candidate IE in VarLTM-Config indicated by lower layers or for the selected cell in accordance with 5.3.7.3 is not equal to the value of ltm-ServingCellUE-MeasuredTA-ID within VarLTM-ServingCellUE-MeasuredTA-ID. If the value is the same, there is no need to perform the replacement operation. | 1> if the value of field ltm-UE-MeasuredTA-ID contained within the LTM-Candidate IE in VarLTM-Config indicated by lower layers or for the selected cell in accordance with 5.3.7.3 contains the field ltm-UE-MeasuredTA-ID is not equal to the value of ltm-ServingCellUE-MeasuredTA-ID within VarLTM-ServingCellUE-MeasuredTA-ID: |  |
| C116 | CATT (Rui) | Mob | 1 | Duplicate | [Ericsson-Tony] Will address this together with C113 |  | UE behaviour is missed on informing lower layer to perform UE based TA measurement after each LTM execution. | add the related UE behaviors as following, 1> if the LTM-Candidate IE in VarLTM-Config indicated by lower layers or for the selected cell in accordance with 5.3.7.3 contains the field ltm-UE-MeasuredTA-ID: if the value of ltm-UE-MeasuredTA-ID is equal to the value of ltm-ServingCellUE-MeasuredTA-ID within VarLTM-ServingCellUE-MeasuredTA-ID: 3> for each ltm-CandidateId value in the ltm-CandidateToAddModList: 4> if the LTM-Candidate with the received ltm-CandidateId value includes ltm-UE-MeasuredTA-ID: 5> if the value of ltm-UE-MeasuredTA-ID is equal to the value of ltm-ServingCellUE-MeasuredTA-ID within VarLTM-ServingCellUE-MeasuredTA-ID: 6> inform lower layers that UE is configured with UE-based TA measurements 2> for each ltm-CandidateId value in the ltm-CandidateToAddModList: 2> if the LTM-Candidate with the received ltm-CandidateId value includes ltm-UE-MeasuredTA-ID: 3> if the value of ltm-UE-MeasuredTA-ID is equal to the value of ltm-ServingCellUE-MeasuredTA-ID within VarLTM-ServingCellUE-MeasuredTA-ID: 4> inform lower layers that UE is configured with UE-based TA measurements 1> if ltm-ConfigComplete is not included within the LTM-Candidate IE in VarLTM-Config indicated by lower layers or for the selected cell in accordance with 5.3.7.3: |  |
| H021 | Huawei (David Lecompte) | Mob | 1 | PropAgree |  |  | Redundant text. | 2> consider ltm-ReferenceConfiguration in VarLTM-Config, associated with the cell group for which the LTM cell switch procedure is triggered, to be the current UE configuration for the fields and configurations which have been released and to be released by the actions above in this procedure; If some fields are "to be released by the actions above in this procdures", since those actions are above, they have been executed and the field have been released, so this text adds nothing. |  |
| H022 | Huawei (David Lecompte) | Mob | 1 | PropAgree | [Ericsson-Tony] I think there is a point in saying that the measConfig should not be included in the referenceConfiguration. This will make also life easier in the specification as we would not need to clarify that at each LTM cell switch the "serving cell" considered for performing the measurements has changed, even if no new measConfig has been received. Therefore, I am more inclined to restrict the presence of measConfig in the reference configuration. |  | measConfig can't be used in the reference configuration. | The VarMeasConfig associated with the CG for which LTM is executed is released according to the above procedure, so the UE considers the measConfig in the reference configuration to be the measConfig for this CG. According to this note, the UE does not execute any action for measConfig in the reference configuration, e.g. procedures in 5.5.2 that populate VarMeasConfig are not executed and since the UE only performs measurements according to VarMeasConfig, if there is a measConfig in the reference configuration, it won't trigger any UE action, so there is no point to include it. Proposal 2> consider ltm-ReferenceConfiguration in VarLTM-Config, associated with the cell group for which the LTM cell switch procedure is triggered, to be the current UE configuration for the fields and configurations which have been released and to be released by the actions above in this procedure; 2> if measConfig is included in the ltm-ReferenceConfiguration in VarLTM-Config: 3> perform the measurement configuration procedure as specified in 5.5.2 considering measConfig in the ltm-ReferenceConfiguration in VarLTM-Config as the received measConfig; 2> NOTE 1: When the UE considers the reference configuration to be the current UE configuration, the UE should store fields and configurations that are part of the reference configuration but should not execute any actions or procedures triggered by the reception of an RRCReconfiguration message which are described in clause 5.3.5.3, unless specified otherwise above. |  |
| V121 | vivo-Chenli | Mob | 1 | PropReject | [Ericsson-Tony] If the received ID in the LTM MAC CE does not have a corresponding IF in VarLTM-Config, there is no actions that UE can do. Therefore, the proposed text seems unnecessary. |  | LTM MAC CE is not encrypted | Consider the LTM cell switch MAC CE is not encrypted, the case that low layer indicates an undefined configuration identity should be considered. Thus, it is better to avoid such case in the procedure. The proposed change is: Add the description “and the value of the LTM candidate configuration identity indicated by lower layer is included in VarLTM-Config” |  |
| V122 | vivo-Chenli | Mob | 1 | Duplicate | [Ericsson-Tony] See V121 |  | LTM MAC CE is not encrypted, similar as V121 | Consider the LTM cell switch MAC CE is not encrypted, the case that low layer indicates an undefined configuration identity should be considered. Thus, it is better to add the error case in the procedure. The proposed change is: Add the error case as below 1> if the LTM cell switch is triggered by an indication from lower layers and the value of the LTM candidate configuration identity indicated by lower layer is not included in VarLTM-Config: 2> send an indication to lower layer to indicate the LTM candidate configuration identity is unknown; |  |
| B203 | Lenovo (Prateek) | Mob | 1 | PropAgree | [Ericsson-Tony] I guess there is a point that saying UE configuration may be misleading. Will try to address this in the rapporteur CR and come up with a better formulation. |  | The meaning of “current” configuration is evolving/ changing from the start of the procedure till the end, and at this point the RRCReconfiguration message in ltm-CandidateConfig has been already applied. | Here, the intention is to release bearers not admitted in the LTM Candidate; so, we should say something like "release the radio bearer(s) and the logical channel(s) that were part of the UE configuration previously but not part of the LTM candidate configuration...". |  |
| Z031 | ZTE (Mengjie) | Mob | 1 | PropAgree | [Ericsson-Tony] Agree. It seems this case is missing. |  | The removal of entries within the UE variable VarLTM-Config is missing in the current text. | Add the following bullet: 1> remove all entries within VarLTM-Config; |  |
| Z032 | ZTE (Mengjie) | Mob | 1 | PropAgree | [Ericsson-Tony] Agree.   [MediaTek] (Li-Chuan Tseng) – v133 (M017): Agreed. |  | There is only one entry in the VarLTM-ServingCellNoResetID. | Suggest to change “all entries” to “the entry”, i.e. to align with the bullet for VarLTM-ServingCellUE-MeasuredTA-ID. |  |
| C117 | CATT (Rui) | Mob | 1 | PropAgree |  |  | there is no need to perform the LTM configuration release procedure here as it will be done after cell selection due to RRC re-establishment (i.e., in 5.3.7.3) | 2> perform the LTM configuration release procedure for the MCG and the SCG as specified in clause 5.3.5.18.7; |  |
| Z033 | ZTE (Mengjie) | Mob | 1 | PropReject | [Ericsson-Tony] I guess that whether multiple attempt can be done is up to the UE implementation, and in any case I guess that UE will simply select the "next cell on the list" once that the cell selection has been done. I think there is no need to distinguish between first and next attempts for the fast RLF recovery. |  | It’s agreed that the LTM based recovery can only be attempted once upon RLF or mobility failure. And the UE keeps the LTM configuration as result of the LTM recovery. However, the UE may fail the first LTM recovery, but it’s allowed to perform the second attempt of LTM recovery according to the current text. So it’ suggested to add a condition to restrict the multiple attempt of LTM recovery after the LTM recovery failure. | Add a clarification to exclude the case that the re-configuration with sync failure of the MCG is detected during the LTM cell switch triggered upon cell selection performed while timer T311 was running. For example: 1> if the cell selection is triggered by detecting radio link failure of the MCG or re-configuration with sync failure of the MCG (which is not detected during the LTM cell switch triggered upon cell selection performed while timer T311 was running) or mobility from NR failure; and | [ZTE-Mengjie] According to the current field description of attemptLTM-Switch, the UE is only allowed to attempt LTM based recovery in the first cell selection after failure. So the current procedural text is not aligned with the behaviour specified in the field description.  Considering that we have not discussed whether multiple attempts after the failure is required or not, we suggest to further discuss and clarify this issue.  If most companies think it can be up to the UE implementation to perform multiple attempts, we are also fine to this. Then it’s suggested to remove “and it is the first cell selection after failure” in the field description to avoid the misalignment between the procedural text and the field description.  attemptLTM-Switch  If present, the UE shall execute an LTM cell switch if selected cell is a LTM candidate cell and it is the first cell selection after failure as described in clause 5.3.7.3. |
| B206 | Lenovo (Prateek) | Mob | 1 | PropReject | [Ericsson-Tony] It seems that the proposed text is the same on what is currently supported. |  | Why is transmitting RRCReestablishmentRequest message dependent upon whether attemptCondReconfig or attemptLTM-Switch has been configured? | Why should UEs not configured with one of these transmit RRCReestablishmentRequest message? My assumption here is that RRC Reestablishment is done by any UE that makes a cell selection successfully when T311 is running – i.e., irrespective of if the attemptCondReconfig or attemptLTM-Switch is configured. If true, this might also need to be fixed for 'attemptCondReconfig' i.e., in legacy. An example change is like following: 1> else: 2> if UE is configured with attemptCondReconfig; or 2> if UE is configured with attemptLTM-Switch: 3> reset MAC; |  |
| Z034 | ZTE (Mengjie) | Mob | 1 | PropAgree |  |  | The description of subsequent CPAC is missing here. Considering that subsequent CPAC is a new feature different from the legacy CPA/CPC, it’s suggested to add “subsequent CPAC” to make the description complete and clear. | 2> if the reportType for the associated reportConfig is condTriggerConfig, the measId is within the MCG VarMeasConfig and is indicated in the condExecutionCond or in the condExecutionCondPSCell associated to a condReconfigId in the MCG VarConditionalReconfig (for CHO, CPA, or MN-initiated inter-SN CPC or subsequent CPAC in NR-DC); or 2> if the reportType for the associated reportConfig is condTriggerConfig, the measId is within the SCG VarMeasConfig and is indicated in the condExecutionCond associated to a condReconfigId in the SCG VarConditionalReconfig (for intra-SN CPC or subsequent CPAC); or 2> if the reportType for the associated reportConfig is condTriggerConfig, the measId is within the SCG VarMeasConfig and is indicated in the condExecutionCondSCG associated to a condReconfigId in the MCG VarConditionalReconfig (for SN-initiated inter-SN CPC or subsequent CPAC in NR-DC); or |  |
| B100 | Lenovo(Lianhai) | Mob | 1 | Disc | [Ericsson-Tony] We already agreed that LTM is not performed while T316 is running, so this implies that LTM SCG should not be triggered. However, agree that something is missing here.  [Samsung] We agree that the issue needs to be discussed. We also think that it might be simpler to initiate Reestablishment if SCG LTM cell switch is triggered while T316 is running. UE may stop reporting LTM measurements for SCG in this case to prevent/minimise the DU from triggering the SCG LTM | Lenovo (to coordinate with other interested companies) | In Legacy MCGFailureInformation message, PSCell change is not performed while T316 is running. For example, UE stops conditional reconfiguration evaluation for CPC or subsequent CPAC when T316 is running. RAN2 has not discussed whether SCG LTM can be triggered or not while T316 is running. If not allowed, SN-CU needs to inform SN-DU once MCGFailureInformation is triggered. Therefore, it will impact RAN3 specification. Maybe, it will impact Xn interface if SN is not aware of whether fast MCG link recovery is performed or not. | Need to discuss whether SCG LTM can be triggered or not while T316 is running. And concluded online in RAN2#125. If agreed not to trigger SCG LTM while T316 is running, LS to RAN3 is needed. |  |
| S794 | Samsung (Aby) | Mob | 1 | Duplication | [Ericsson-Tony] See E071. This is related to the editor's note we have about the co-existance of LTM and other features. I expect this to be treated via companies' contributions which are outside of the ASN.1 review. |  | As L3 mobility and LTM are supported for the same cell, UE may be configured for relaxed measureemnts for L3 measurements. | Add the following condition. The relaxed measurement criterion for UE with low mobility in RRC\_CONNECTED is fulfilled when: - (SS-RSRPRef – SS-RSRP) < SSearchDeltaP-Connected, Where: - SS-RSRP = current L3 RSRP measurement of the SpCell based on SSB (dB). - SS-RSRPRef = reference L3 RSRP measurement of the SpCell based on SSB (dB), set as follows: - After receiving low mobility criterion configuration, or - After MAC of the CG successfully completes a Random Access procedure after applying a reconfigurationWithSync in spCellConfig of the CG while low mobility criterion is configured, or - Upon an indication from lower layer that the LTM cell switch execution has been successfully completed for the CG, or - If (SS-RSRP - SS-RSRPRef) > 0, or |  |
| Z035 | ZTE (Mengjie) | Mob | 1 | PropAgree |  |  | RAN2 agreed that “The coexistence of subsequent CPAC and SCG deactivation is not supported in Rel-18”. The description for subsequent CPAC is missing here. | The field is absent if CPA or CPC or subsequent CPAC is configured for the UE, or if the RRCReconfiguration message is contained in CondRRCReconfig, or PSCell is configured with tag2. |  |
| V123 | vivo-Chenli | Mob | 1 | PropAgree | [Ericsson-Tony] It makes sense to clarify this as PCell change with PSCell change is not supported for LTM. |  | Pcell change with PSCell change for LTM is not allowed | As we have agreed that PCell change with PSCell change is not allowed, there is a need to clarify that in case the RRCReconfiguration message is contained in LTM-config, this parameter should also be absent. The proposed change is to add the description at the end: “or if the RRCReconfiguration message is contained in LTM-config” |  |
| H023 | Huawei (David Lecompte) | Mob | 1 | PropAgree |  |  | It is unclear what this refers to. | Add field description e.g. "Indicates a PathlossReferenceRS in the pathlossReferenceRS-List of the LTM candidate that includes this CandidateTCI-State." Note: It is assumed that pathlossReferenceRS-List is the name that will be used in the UE variable, as a UE variable should not have a field called xxxToAddModList (even though the list element can be XxxToAddModList) |  |
| F013 | <Fujitsu (Meiyi)> | Mob | 1 | Duplicate | [Ericsson-Tony] See H023 |  | The IE CandidateTCI-State defines a TCI states configuration and pathlossReferenceRS-Id is included in the IE for Joint TCI states. But, the field is optional presence. It means that pathlossReferenceRS-Id can be absent. In this case, the UE cannot determine UL power. | add field description of pathlossReferenceRS-Id, including: e.g.if this field is absent, pathlossReferenceRS-Id in the IE TCI-State for the joint TCI state of the serving cell is used. |  |
| H025 | Huawei (David Lecompte) | Mob | 1 | PropAgree |  |  | It is unclear what this refers to. | Add field description e.g. "Index of a SSB/PBCH block as indicated in ltm-SSB-Config of the LTM candidate that includes this CandidateTCI-State." |  |
| H026 | Huawei (David Lecompte) | Mob | 1 | PropAgree |  |  | It is unclear what this refers to. | Add field description e.g. "Indicates an NZP-CSI-RS-Resource in the nzp-CSI-RS-ResourceList of the LTM candidate that includes this CandidateTCI-State." Note: It is assumed that pathlossReferenceRS-List is the name that will be used in the UE variable, as a UE variable should not have a field called xxxToAddModList (even though the list element can be XxxToAddModList) |  |
| Z054 | ZTE (Fei Dong) | Mob | 1 | PropReject | [Ericsson-Tony] The IE is called Candidate-TCI-State, which is included in LTM-Condif. There is no misunderstanding to what ID the field refers to. This is inferred already by the ASN.1 structure. |  | Regarding the referenceSignal-r18 in CandidateTCI-State, there are two choices of reference signal, one is ssb which is indicated by ssb-index, the other one is CSI-RS which is indicated by NZP-CSI-RS-resource Id. It is not clear where the ssb-index, NZP-CSI-RS-resource-Id is addressed. In our understanding, both ssb-index, NZP-CSI-RS-resource Id shall be addressed from the LTM candidate cell where they are configured which shall be clarified in the field description of referenceSignal-r18 in CandidateTCI-state | referenceSignal Reference signal with which quasi-collocation information is provided. The ssb-index present in this field refers to the LTM Candidate Cell where this field is configured. The NZP-CSI-RS-resource Id present in this field refers to ltm-nzp-CSI-RS-ResourceToAddModList to the LTM Candidate Cell where the field is configured. |  |
| H027 | Huawei (David Lecompte) | Mob | 1 | PropAgree |  |  | It is unclear what this refers to. | Same comments and suggestions like H023, H025 and H026 but for CandidateTCI-UL-State |  |
| F014 | <Fujitsu (Meiyi)> | Mob | 1 | Duplicate | [Ericsson-Tony] See H027 |  | The IE CandidateTCI-UL-State defines an uplink TCI states configuration and pathlossReferenceRS-Id is included. But, the field is optional presence. It means that pathlossReferenceRS-Id can be absent. In this case, the UE cannot determine UL power. | add field description of pathlossReferenceRS-Id, including: e.g. if this field is absent, pathlossReferenceRS-Id in the IE TCI-UL-State for the UL TCI state of the serving cell is used. |  |
| H024 | Huawei (David Lecompte) | Mob | 1 | PropAgree | [Ericsson-Tony] |  | “quasi-collocation” is a DL concept | Reference signal with which quasi-collocation spatial relation information is provided. |  |
| Z055 | ZTE (Fei Dong) | Mob | 1 | Duplicate | [Ericsson-Tony] See Z054 |  | Regarding the referenceSignal-r18 in CandidateTCI-UL-State, there are two choices of reference signal, one is ssb which is indicated by ssb-index, the other one is CSI-RS which is indicated by NZP-CSI-RS-resource Id. It is not clear where the ssb-index, NZP-CSI-RS-resource-Id is addressed from RRC spec perspective. In our understanding, both ssb-index, NZP-CSI-RS-resource Id shall be addressed from the LTM candidate cell where they are configured which shall be clarified in the field description of referenceSignal-r18 in CandidateTCI-UL-state | referenceSignal Reference signal with which quasi-collocation information is provided. The ssb-index present in this field refers to the LTM Candidate Cell where this field is configured. The NZP-CSI-RS-resource Id present in this field refers to ltm-nzp-CSI-RS-ResourceToAddModList to the LTM Candidate Cell where the field is configured. |  |
| Z036 | ZTE (Mengjie) | Mob | 1 | PropAgree | [Ericsson-Tony] |  | The description for subsequent CPAC is missing here. | The IE CondReconfigId is used to identify a CHO, CPA, or CPC or subsequent CPAC configuration. |  |
| X127 | Xiaomi (Yi) | Mob | 1 | PropAgree | [Ericsson-Tony] Makes sense to have a field description.  [OPPO v156]: The field description for securityCellSetID has been caputured under ConditionalReconfiguration IE. |  | Missing the field description for the securityCellSetId | Add the field description for the securityCellSetId, e.g. This field identifies the security cell set for the candidate PSCell. |  |
| V136 | vivo(Jing) | Mob | 1 | Disc | [Ericsson-Tony] | Vivo (to coordinate with the other interested companies). | separate execution condition for subsequent CPA | after subsequent CPAC execution, the condExecutionCond (or condExecutionCondSCG) in VarConditionalReconfig should be replaced with the condExecutionCond (or condExecutionCondSCG) in condExecutionCondToAddModList within subsequentCondReconfig. After that, the conditional reconfiguration could not be used for CPA anymore, which is not aligned with the #123bis agreement: If there are maintained subsequent CPAC configurations with CPA execution conditions after SCG release, the maintained configurations can be used for the subsequent CPA execution Thus it should be allowed to configure both condExecutionCond and condExecutionCondSCG, so that one of them can be kept for subsequent CPA. condExecutionCond or condExecutionCondSCG (not both) ( condExecutionCond or condExecutionCondSCG (not both except in subsequent CPAC) A contribution R2-24xxxxx may be brought to elaborate this issue. |  |
| E140 | Ericsson (Cecilia) | Mob | 1 | PropAgree | [Ericsson-Tony] |  | The scpac-ConfigComplete indicator is common for the MCG and the SCG, but the reference configuration can refer to either the MCG or the SCG. The scpac-ConfigComplete needs to be separate for the MCG part and the SCG part of the configuration, otherwise it is not clear which configuration it refers to. | Add separate indicators for the MCG and the SCG part of the configuration. | [ZTE-Mengjie] We think there is no need to introduce separate complete indicators for the MCG and the SCG. The current subsequent CPAC execution procedure is related to whether the candidate configuration is stored in the MCG VarConditionalReconfig or the SCG VarConditionalReconfig:  - If the candidate configuration is stored in the MCG VarConditionalReconfig, the candidate configuration is in MN format and the complete indicator means the configuration includes complete MCG part and complete SCG part.  - If the candidate configuration is stored in the SCG VarConditionalReconfig, the candidate configuration is in SN format and the complete indicator means the configuration includes only complete SCG part.  There is no misunderstanding in each case.  If we introduce separate complete indicators for the MCG and the SCG, the subsequent CPAC execution procedure needs to be modified accordingly, which shall introduce additional complexity. |
| I132 | Intel (Sudeep) | Mob | 1 | PropAgree | [Ericsson-Tony] WI code is missing, but is clear that this is about mobility. |  | Missing Need code | Add Need M |  |
| Z037 | ZTE (Mengjie) | Mob | 1 | PropAgree |  |  | A condition can be added for this IE considering that the field is mandatory present if there is at least one inter-SN candidate PSCell for subsequent CPAC, i.e. similar to the condition of servingSecurityCellSetId-r18. | Change “Need M” to “Cond condInitialSCPAC”. |  |
| S795 | Samsung (Aby) | Mob |  | PropReject | [Ericsson-Tony] I think that the case where the network provides a non-complete configuration and no reference configuration can be tagged as (very) bad network implementation. Therefore, there is no need to clarify the obvious, we can rely on the network to do the right thing. |  | scpac-ReferenceConfiguration is defined as optional IE. However it is necessary that gNB provides the UE with reference configuration when there is at least one non-complete configuration. (If UE or network doesnt support reference configuration, non-complete configuration also should not be present). Otherwise, the UE will perform measurement and evaluation but subsequent CPAC execution will fail. | Following needs to be added: (Similar statement need to be included in the description for LTM reference configuration also.) scpac-ReferenceConfiguration Includes the reference configuration for the candidate supporting subsequent CPAC. Network ensures that the reference configuration is available to the UE if there is at least one candidate cell configured with non-complete subsequent cpac configuration. |  |
| D001 | NTT Docomo (Tianyang Min) | FeMob | 1 | PropReject | [Ericsson-Tony] I think in this case what we want to specify is a network restriction. Therefore, the use of "Shall" seems correct. |  | For network behavior, we usually use "should not"" instead of "shall not" | the network shall should not configure the field sk-Counter within the RRCReconfiguration message for conditional reconfiguration execution for subsequent CPAC. |  |
| X128 | Xiaomi (Yi) | Mob | 1 | PropAgree |  |  | Only in inter-SN subsequent CPAC, security information is needed. Because RAN2 has agreed the MN format and SN format for subsequent CPAC can not be configured simutalously. And the security configuration like sk-counter is always provided by the MN. Hence, for the intra-SN subsequent CPAC without MN involvement, the field for security configuration shall be absent. | The field is mandatory present upon the initial conditional reconfiguration which includes at least one inter-SN candidate PSCell supporting subsequent CPAC. The field is absent for the conditional reconfiguration associated with SCG. Otherwise, the field is optional, need M. |  |
| I134 | Intel (Sudeep) | Mob | 1 | PropAgree | [Ericsson-Tony] I see there is a RIL marked with "GEN" which propose to merge all the new IEs created for IAB, NTN, and mobility. We would need to implement this change once that RIL is solved. |  | Cant find a behaviour on absence. Change to Need M | Change Need code from S to M |  |
| V124 | vivo-Chenli | Mob | 2 | PropReject | [Ericsson-Tony] I see there is a RIL marked with "GEN" which propose to merge all the new IEs created for IAB, NTN, and mobility. We would need to implement this change once that RIL is solved. About the use of power control parameter, RAN1 I guess will not discuss this, so if there is some problem in supporting these I expect that company bring a contribution in the next RAN1 meeting. |  | FFS whether optional or mandatory for power control related parameters | In our understanding, it is still FFS whether it is optional or mandatory for power control related parameters, and further discussion is needed in RAN1. Thus, we suggest either to remove this parameter if RAN1 has no further agreements after this meeting, or keep it as mandatory similar as in legacy. |  |
| V125 | vivo-Chenli | Mob | 2 | Duplicate | [Ericsson-Tony] See V124 |  | FFS whether optional or mandatory for power control related parameters | In our understanding, it is still FFS whether it is optional or mandatory for power control related parameters, and further discussion is needed in RAN1. Thus, we suggest either to remove this parameter if RAN1 has no further agreements after this meeting, or keep it as mandatory similar as in legacy. |  |
| V126 | vivo-Chenli | Mob | 1 | PropAgree | [Ericsson-Tony][Ericsson-Tony] I see there is a RIL marked with "GEN" which propose to merge all the new IEs created for IAB, NTN, and mobility. We would need to implement this change once that RIL is solved. |  | The field description for power control related parameter is missed | Add the corresponding field description for the parameters “sdt-P0-PUSCH-r18” and “sdt-Alpha-r18”, (BTW, the correct IE name should be “ltm-P0-PUSCH-r18” and “ltm-Alpha-r18”) |  |
| Z056 | ZTE (Fei Dong) | Mob | 1 | Duplicate | [Ericsson-Tony] See I134 |  | In CG-LTM-Configuration-r18, the ltm-SSB-Subset-r18 is an optional IE with need S, but there is no any clue about what’s the UE behavior if the field is absent. Considering the configuration of CG-LTM is assumed to be similar as the CG-SDT from RAN2 perspective, it shall add some description in its field description about the absence of this field, such as ‘ If the field is absent, UE assumes the SSB set includes all actually transmitted SSBs.’ CG-LTM-Configuration-r18 ::= SEQUENCE { cg-LTM-RetransmissionTimer-r18 INTEGER (1..64) OPTIONAL, -- Need R ltm-SSB-Subset-r18 CHOICE { shortBitmap-r18 BIT STRING (SIZE (4)), mediumBitmap-r18 BIT STRING (SIZE (8)), longBitmap-r18 BIT STRING (SIZE (64)) } OPTIONAL, -- Need S | ltm-SSB-Subset Indicates SSB subset for SSB to CG PUSCH mapping within one CG configuration. If the field is absent, UE assumes the SSB set includes all actually transmitted SSBs |  |
| H067 | Huawei (David Lecompte) | Mob | 1 | PropAgree |  |  | Strange condition. | This condition seems to say that the UE can be reconfigured with this field, as part of a normal configuration, if it is configured with LTM. However, this field can only be used for intial transmission at LTM execution, i.e. it can only be in an RRCReconfiguration message contained in ltm-CandidateConfig. The field is optionally present, Need R, if the UE is configured with at least an LTM candidate configurationin an RRCReconfiguration message contained in an ltm-CandidateConfig. Otherwise, the field is absent. |  |
| V127 | vivo-Chenli | Mob | 1 | PropReject | [Ericsson-Tony] In the RAN1 parameter list we have one field for the aperiodic and one for the semi-persistent. What is present in RRC seems in line with RAN1 has agreed and sent to RAN2. |  | ltm-AssociatedReportConfigInfo configures the semi-persistent report | According to RRC parameter from RAN1, this field configures the semi-persistent CSI report of LTM candidate cells. Thus, the proposed change is to change “aperiodic” to “semi-persistent” |  |
| H028 | Huawei (David Lecompte) | Mob | 1 | Duplicate | [Ericsson-Tony] See C118 |  | Should be semi-persistent. | change "aperiodic" so "semi-persistent" |  |
| C118 | CATT (Rui) | Mob | 1 | PropAgree |  |  | The description is not correct as this field does not configure for aperiodic CSI reports of LTM candidate cells. It should be “This field configures the semi-persistent CSI reports on PUSCH of candidate cells.” According to Rel-18 higher layers parameter list (R1-2312708). | This field configures the aperiodic CSI reports semi-persistent CSI reports on PUSCH of LTM candidate cells. |  |
| H807 | Huawei (YinghaoGuo) | Mob | 2 | PropReject | [Ericsson-Tony] This is related to the sharing of RACH resources that we already discussed in the WI and it was not agreed at the end. Therefore, I would say that we keep to what we decided and we don't rediscuss this. It is true that network needs to pre-allocate resources, but what is proposed here is an optimization that is too late to do at this point. |  | Configuration may not be sufficient to share RACH time-frequency resources, e.g. with cell-specific RACH resources | If EarlyUL-SyncConfig as it is defined now is the only information that the cell sending the PDDCH order receives from the candidate cell, it seems necessary to allocate time-frequency resources thare are different from the time-frequency resources for cell-specific RACH configuration of the candidate target cell (as in RACH-ConfigCommon provided in SI). This increases the amount of radio resources used for RACH, while it may be possible to share resources, e.g. by using preambles or ROs not used by the candidate target cells for its own UEs. Proposal: either add more information to EarlyUL-SyncConfig for the DU (not useful for the UE) or define some information in an inter-node message so that the target DU knows. |  |
| E111 | Ericsson (Tony) | Mob | 2 | PropAgree | Intel (Sudeep): Agree with the comment |  | There is not reason to have this field as Need M, as it would be then difficult for the network to release it (because then network needs to set EarlyUL-SyncConfig first to release and then to setup (then consuming two messages). Would be good to change this from Need M to Need R. | Change need code from Need M to Need R. |  |
| E112 | Ericsson (Tony) | Mob | 2 | PropAgree |  |  | In case more root sequence indexes will be added in the future, would be good to make this field as OPTIONAL with Need R code. | Make this field OPTIONAL with Need R code. |  |
| Z058 | ZTE (Fei Dong) | Mob | 2 | Disc | [Ericsson-Tony] I think we need to discuss this as the configuration was received from RAN1. | ZTE (to coordinate with the other companies) | In earlyUL-syncConfig-r18, the ltm-prach-SubcarrierSpacing-r18 is a mandatory information element which is not needed since the subcarrier spacing for MSG.1 is fixed according to prach-ConfigurationIndex in rach-ConfigGeneric, which is similar as ‘msg1-SubcarrierSpacing’ in RACH-ConfigCommon | (1)Change the ltm-prach-subcarrierSpacing- r18 from being mandatory to being optional with a condition-LTM-L139, and change the field description correspondingly. ltm-prach-SubcarrierSpacing-r18 SubcarrierSpacing, OPTIONAL, -- COND LTM-L139 ltm-prach-SubcarrierSpacing Indicates subcarrier spacing of PRACH for LTM (see TS 38.211 [16], clause 5.3.2). Only the following values are applicable depending on the used frequency: FR1: 15 or 30 kHz FR2-1: 60 or 120 kHz FR2-2: 120, 480, or 960 kHz If absent, the UE applies the SCS as derived from the prach-ConfigurationIndex in RACH-ConfigGeneric (see tables Table 6.3.3.1-1, Table 6.3.3.1-2, Table 6.3.3.2-2 and Table 6.3.3.2-3, TS 38.211 [16]). (2)Add Explanation to the Cond LTM- L139： The field is mandatory present if prach-RootSequenceIndex L=139, otherwise the field is absent, Need S. |  |
| E060 | Ericsson (Tony) | Mob | 1 | PropAgree |  |  | The field has a missing spare value that can be used for future extensions. | Implement the following change: n-TimingAdvanceOffset-r18 ENUMERATED { n0, n25600, n39936, spare1 } OPTIONAL, -- Need R |  |
| F015 | <Fujitsu (Meiyi)> | Mob | 2 | PropReject | [Ericsson-Tony] I guess that is network configure EarlyUL-Sync IE, then it would include this field also. Maybe bring this in RAN1? |  | The IE EarlyUL-SyncConfig is used to configure random access resources for the early UL synchronization procedure. In the IE, n-TimingAdvanceOffset is configured with Optinal Need R. It means that the parameter can be absent and it will be released if absent. We think that we should consider two cases: 1) EarlyUL-SyncConfig is not configured; 2) EarlyUL-SyncConfig is configured but n-TimingAdvanceOffset is not configured. In case 1) the paremeter is released while we need default value for case 2). So, Need R should be changed to Need S. | 1) Need R is changed to Need S; 2) update the field description: The N\_TA-Offset to be applied for all uplink transmissions on a candidate cell. If the field is absent in configured IE EarlyUL-SyncConfig, the UE applies the value defined for the duplex mode and frequency range of this candidate cell. See TS 38.133 [14], table 7.1.2-2. If the IE EarlyUL-SyncConfig is not configured, N\_TA-Offset is released. |  |
| E113 | Ericsson (Tony) | Mob | 2 | PropAgree |  |  | Change all the need codes of the fields which are not list or setupRelease structure as Need R. There is no reason to keep them as Need M as these fields are stored anyway in a UE variable. | Change all the need codes of the fields which are not list or setupRelease structure as Need R |  |
| C119 | CATT (Rui) | Mob | 1 | PropAgree |  |  | ltm-CandidatePCI-r18 should not be a mandatory IE.the PCI can be optionally present if it is not for the first time configuration. | ltm-CandidatePCI-r18 PhysCellId, OPTIONAL, -- Need M |  |
| Z053 | ZTE (Fei Dong) | Mob | 1 | PropAgree |  |  | The field description of ltm-NoResetID-r18 is absent in LTM-Candidate. | Add the field description of ltm-NoResetID-r18 as below in LTM-Candidate ltm-NoResetID This field indicates whether the UE should perform RLC entity re-establishment and PDCP recovery for the data radio bearer, please see the subclause 5.3.5.18.6 |  |
| E050 | Ericsson (Tony) | Mob | 2 | PropAgree |  |  | It would be good to group all the related L1 measurements related configuration under within one new IE. This will make also the life easier to RAN3 since only the new IE will need to be referred over F1 and not every single L1 measurement configuration. | Group all L1 measurements related configurations under one new IE. We are planning to submit a contribution about this. |  |
| H030 | Huawei (David Lecompte) | Mob | 1 | PropAgree | [Ericsson-Tony] I see this is already captured in the MAC specification. Therefore, good to align. |  | Whether to use joint or separate TCI states for candidate TCI states is unclear | Add a field like unifiedTCI-StateType like in Rel-17 configuration. If no field is added, we need a statement that if any UL TCI state is in the UE variable, the UE considers that separate mode is used and otherwise joint mode is used (but it seems better to align with Rel-17 and have a field). |  |
| V128 | vivo-Chenli | Mob | 2 | PropAgree |  |  | The IE in ToAddModList is different with the one in ToReleaseList | “TCI-StateId” should be “CandidateTCI-State-r18” |  |
| V129 | vivo-Chenli | Mob | 2 | PropAgree |  |  | The IE in ToAddModList is different with the one in ToReleaseList | “TCI-UL-StateId-r17” should be “CandidateTCI-UL-State-r18” |  |
| C120 | CATT (Rui) | Mob | 2 | PropReject | [Ericsson-Tony] This was present in the RAN1 parameter list. If there is some disagreement about what RAN1 decided, I guess that interested companies should bring contributions in RAN1. |  | this IE ltm-nzp-CSI-RS-ResourceSetToAddModList is useless as it never be applied by UE.UE performs LTM L1 measurement based on ltm-CSI-ResourceConfigToAddModList.But ltm-CSI-ResourceConfigToAddModList does not refer to ltm-nzp-CSI-RS-ResourceSetToAddModList. | remove the IE ltm-nzp-CSI-RS-ResourceSetToAddModList-r18 and ltm-nzp-CSI-RS-ResourceSetToReleaseList ltm-nzp-CSI-RS-ResourceSetToAddModList-r18 SEQUENCE (SIZE (1..maxNrofNZP-CSI-RS-ResourceSets)) OF NZP-CSI-RS-ResourceSet OPTIONAL, -- Need N ltm-nzp-CSI-RS-ResourceSetToReleaseList-r18 SEQUENCE (SIZE (1..maxNrofNZP-CSI-RS-ResourceSets)) OF NZP-CSI-RS-ResourceSetId OPTIONAL, -- Need N |  |
| Z060 | ZTE (Fei Dong) | Mob | 1 | Duplicate | [Ericsson-Tony] See Z053  [MediaTek] (Li-Chuan Tseng) – v133 (M003): ltm-NoResetID This field is used to determine whether the UE performs L2 reset (RLC re-establishment and PDCP recovery) for DRBs upon LTM execution. UE performs such L2 reset if the serving cell's ltm-ServingCellNoResetID is the same as ltm-NoResetID is the same as. Please see subclause 5.3.5.18.6. |  | The field description of the ltm-NoResetID is missing in the description field of LTM-Candidate | ltm-NoResetID This field indicates whether the UE should perform the RLC re-establishment and/or PDCP recovery towards an LTM candidate.when performing the LTM Cell switch, |  |
| H032 | Huawei (David Lecompte) | Mob | 1 | PropAgree |  |  | Not the right place for this description. | For each fied xxxId, the field description says where to an xxx defined/configured by which field it refers. The field description of the xxxToAddModList does not list all the fields in all other structures that can refer to it. Proposal: remove this (actually, the whole field description brings no information, see H031). |  |
| C121 | CATT (Rui) | Mob | 1 | PropAgree |  |  | it is not correct to use “add and/or modify”. The IE pathlossReferenceRS-ToReleaseList is for release, not for “and/or modify”. | A list of Reference Signals to be used for path loss estimation for unified TCI state for LTM to add and/or modify release. |  |
| E113 | Ericsson (Tony) | Mob | 2 | PropAgree |  |  | Change all the need codes of the fields which are not list or setupRelease structure as Need R. There is no reason to keep them as Need M as these fields are stored anyway in a UE variable. | Change all the need codes of the fields which are not list or setupRelease structure as Need R |  |
| S791 | Samsung (Weiwei Wang) | Mob | 1 | PropReject | [Ericsson-Tony] For the case of L3 HO, if LTM is not released, then this is not needed. This field is only needed the very first time LTM is configured. Later on the UE will just use the field stored in the UE variable. |  | We identify some cases needing presence of ltm-ServingCellNoResetID-r18 in addition to FirstLTM-only, e.g., when configuring L3 HO via keeping the LTM config, when the serving cell and the prepared candidate cells are all under different gNB-DUs. | Change the presence of ltm-ServingCellNoResetID-r18 to optional (delete "Cond FirstLTM-Only") |  |
| Z059 | ZTE (Fei Dong) | Mob | 2 | Duplicate | [Ericsson-Tony] See A702 i guess we can align with the L2 reset ID and have the need code as need N.  [Huawei] Agree with the reasoning but this field is not stored as part of the UE configuration, it is stored in a UE variable and it is not maintained, so should be Need N. |  | In LTM-Config, the ltm-ServingCellUE-MeasureTA-ID-r18 is an optional information element with cond LTM, the condition description is shown as below: LTM This field is optional present, Need M, if the UE is configured with at least an LTM candidate configuration. Otherwise, the field is absent. Due to the ‘otherwise’, the LTM-Config without any LTM-Candidate is allowed, however, It makes no sense if there is no any LTM-Candidate in the LTM-Config from NW perspective, It seems such condition is incorrect. In this sense, we suggest to correct the information element from optional with conditions to the option Need-M. | Change LTM to Need M, and delete the corresponding explanation. |  |
| M005 | MediaTek (Li-Chuan Tseng) | Mob | 1 | PropAgree |  |  | The field description of ltm-ServingCellNoResetID should better explain how this ID is used. | ltm-ServingCellNoResetID This field is used to determine whether the UE performs L2 reset (RLC re-establishment and PDCP recovery) for DRBs upon LTM execution. UE performs such L2 reset if the target's ltm-NoResetID is the same as the ltm-ServingCellNoResetID. Please see subclause 5.3.5.18.6. |  |
| H033 | Huawei (David Lecompte) | Mob | 1 | PropAgree | [Ericsson-Tony] We can go with Intel suggestion  Intel (Sudeep): Agree that it is currently unclear. Suggestion: This field is mandatory present in the first RRCReconfiguration message which include LTM-Config with at least one that provides the first LTM candidate configuration.  [MediaTek] (Li-Chuan Tseng) – v133 (M006): We also think the meaning of condition FirstLTM-Only is unclear. Proposed Change: Explain the rule that network must configures corresponding field (e.g., ltm-ServingCellNoResetID) if at least one LTM candidate is configured in field description, and make the field OPTIONAL Need M |  | Meaning is unclear. | The point is that the network always configures this field whenever it configures an LTM-Candidate. This should be in the field description and no unclear condition is needed. |  |
| M007 | MediaTek (Li-Chuan Tseng) | Mob | 1 | Duplicate | [Ericsson-Tony] See A702 i guess we can align with the L2 reset ID and have the need code as need N. |  | The meaning of condition LTM is unclear. It seems that all fields here can be absent if no LTM candidate is configured? | Remove the condition LTM. Simply make corresponding field Optional Need M. |  |
| I321 | Intel (Sudeep) | Mob | 1 | PropAgree | [Huawei] "if the UE is configured ..." is useless and can be removed, then a separate configuration is used for the MCG and the SCG; so there is no need to release the SCG case, since it is never there. |  | A Need R code is rquired here on absence to release the configuration when the last LTM candidate is released. | Add Need R for absence for this and the previous condition. |  |
| Z057 | ZTE (Fei Dong) | Mob | 1 | PropAgree | [Ericsson-Tony] i can try to describe better the mapping between the two lists.  [MediaTek] (Li-Chuan Tseng) – v133 (M008): The field description should better explain the one-to-one mapping between the SSBs in ltm-CSI-SSB-ResourceList and the candidate IDs in ltm-CandidateIdList. Also, we should use "candidate ID" instead of "candidate cell ID" to align with the field description of CandidateID. Proposed Change: ltm-CandidateIdList This field Indicates the LTM candidate IDs related to the SSBs in the ltm-CSI-SSB-ResourceList. The list has the same number of entries as ltm-CSI-SSB-ResourceList. The first entry of the list indicates the value of the candidate ID for the first entry of ltm-CSI-SSB-ResourceList, the second entry of this list indicates the value of the PCI for the second entry of ltm-csi-SSBResourceList, and so on. |  | In LTM-CSI-ResourceConfig, how to associate the SSB-Index in ltm-CSI-SSB-ResourceList-r18 with the LTM-CandidateId list in the ltm-CandidateIdList-r18 is missing in the field description which shall be added. | ltm-CandidateIdList This field Indicates the LTM candidate cell IDs related to the SSBs in the ltm-CSI-SSB-ResourceList. The list has the same number of entries as ltm-CSI-SSB-ResourceList. The first entry of the field shall be associated with the first entry of the ltm-CSI-SSB-ResourceList-r18 present in the same LTM-CSI-SSB-ResourceSet, the second entry of the field shall be associated with the second entry of the ltm-CSI-SSB-ResourceList-r18 present in the same LTM-CSI-SSB-ResourceSet, and so on. |  |
| C122 | CATT (Rui) | Mob | 1 | PropAgree |  |  | The field description is not necessary.There is no field with name “ltm-CSI-SSB-ResourceSetId”, | remove the field description of “ltm-CSI-SSB-ResourceSetId” ltm-CSI-SSB-ResourceSetId This field is used to idenfity on SS/PBCH block resource set. |  |
| A703 | Apple (Naveen) | Mob | 1 | Duplicate | [Ericsson-Tony] See C122 |  | this field is not present in ASN.1 |  |  |
| I146 | Intel (Sudeep) | Mob | 1 | Disc | [Ericsson-Tony] The change where the RILs is pointing seems to be related to NTN. Or anyway is not a change just for Rel-18 but also for previous releases. |  | CHO related configurations are not considered oneshot and hence cannot be Need N. Need R could be OK | Change Need N to Need R. |  |
| H068 | Huawei (David Lecompte) | Mob | 1 | PropAgree |  |  | Useless Need code | "in case xxx is part of an" cannot change, so no need for the final Need R. Also "in case xxx is part of an" is a should be simplified e.g. "in an". The field is optionally present in case NZP-CSI-RS-Resources is part of an LTM-Candidate IE. Otherwise, the field is absent, Need R. |  |
| I150 | Intel (Sudeep) | Mob | 1 | PropAgree | Huawei: agree. In addition, the wording can be simplified. The field is optionally present need R in case NZP-CSI-RS-ResourcesSet is part of an LTM-Candidate IE. Otherwise, the field is absent, Need R. |  | Missing Need code for optional presence. And not essential need code for absence. | Use Need R for optional presence and delete Need code for absence. |  |
| Z038 | ZTE (Mengjie) | Mob | 1 | PropAgree | [Ericsson-Tony] However, "shall omit" is not the right wording as is the netwokr who signal those fields. Is more correct to say that UE "shall ignore". |  | According to RAN1 RRC parameter list in R1-2310695, the IE preambleTransMax and ra-ResponseWindow are not applicable for the LTM operation. Note: UE shall omit the IE 'preambleTransMax', 'ra-ResponseWindow' in the existing 'rach-ConfigGeneric' IE if it is included in the 'ltm-EarlyUlSyncConfig-r18' IE, which are not appliable for LTM operation. Since these IEs are mandatory in the IE rach-ConfigGeneric, a clarification is needed in the field description to specify that the UE shall omit these IEs for LTM. | preambleTransMax Max number of RA preamble transmission performed before declaring a failure (see TS 38.321 [3], clauses 5.1.4, 5.1.5). The UE shall omit this field if the rach-ConfigGeneric is included in the ltm-EarlyUlSyncConfig. ra-ResponseWindow Msg2 (RAR) window length in number of slots. The network configures a value lower than or equal to 10 ms when Msg2 is transmitted in licensed spectrum and a value lower than or equal to 40 ms when Msg2 is transmitted with shared spectrum channel access (see TS 38.321 [3], clause 5.1.4). UE ignores the field if included in SCellConfig. If ra-ResponseWindow-v1610 or ra-ResponseWindow-v1700 is signalled, UE shall ignore the ra-ResponseWindow (without suffix). The field ra-ResponseWindow-v1700 is applicable to SCS 480 kHz and SCS 960 kHz. The UE shall omit this field if the rach-ConfigGeneric is included in the ltm-EarlyUlSyncConfig. |  |
| E068 | Ericsson (Tony) | Mob | 2 | Disc |  | Ericsson (to coordinate with interested companies) | When providing a RadioBearerConfig for an LTM candidate cell configuration, we needs to clarify that the SecurityConfig should not be provided (except for the keyToUse field), even if, in this case, the radio bearer may be considered as the first addition. An exception for LTM need to be added. | Add an exception that, in case this field is used for LTM, in this case its presence is not mandatory (at least for the field condition of securityAlgorithmConfig). We are planning to submit a contribution about this. |  |
| E069 | Ericsson (Tony) | Mob | 2 | Disc |  | Ericsson (to coordinate with interested companies) | The LTM candidate configuration (or reference configuration) may include the RLC-Config, but whether the UE should appy it or not depends on whether L2 reset is triggered for an LTM cell switch or not. In this case, we need to clarify that the UE should ignore the RLC-Config in case L2 reset is not done. | Clarify that UE should ignore the RLC-Config in case L2 reset is not done. We are planning to submit a contribution about this. |  |
| L006 | LGE (Siyoung Choi) | Mob | 0 | PropReject | [Ericsson-Tony] This is the name of the constant which is used within the ASN.1 structure. There is no room for misunderstanding as the ASN.1 structure itself clarify what this is about. |  | The variable name maxNrofLTM-configs seems to mean the maximum number of LTM-Configs. Actually we have only one LTM-Config for MCG or SCG. In other words, the current name mislead as to meaning. | it seems maxNrofLTM-CandidateConfigurations is more suitable variable name. It is more appropriate to adopt the variable name for the maximum number of LTM candidate cells as follows, e.g., 1) maxNrofLTM-CandidateConfigurations 2) maxNrofLTM-CandidateConfigs 3) maxNrofLTM-Candidates or else |  |
| X129 | Xiaomi (Yi) | Mob | 1 | PropReject | [Ericsson-Tony] I have some simpathy for the proposal, but the existing text is already quite complicated to read and adding more things will not make things easier. I would tend to keep current text as there is not really anyway bad with the current wording. |  | This description may be a little redundant. Similar to the legacy CHO, we don’t need to distinguishing between LTM tiggered by network and LTM based recovery. A simple description can be used. | Also, for the MCG and SCG upon an indication from lower layer that an LTM cell switch procedure is triggered and, for the MCG, upon performing an LTM cell switch procedure following cell selection performed while timer T311 is running or upon LTM cell switch execution. |  |
| B204 | Lenovo (Prateek) | Mob | 1 | PropAgree |  |  | Same as what? "Same" needs to be shortly described. | "as used in UL" can be added at the end of the sentence like "for the same HARQ process as used in UL". |  |
| B205 | Lenovo (Prateek) | Mob | 1 | PropReject | [Ericsson-Tony] I don't see the need for adding more text. I think we don't need to distinguish the behaviour with attemptLTM-Switch. |  | Performing Re-establishment depends on attemptLTM-Switch. | RAN2 intention is to initiate the RRC re-establishment procedure if attemptLTM-Switch is not configured, or if the selected cell is not one of the configured candidate cells; initiate LTM cell switch procedure, otherwise. The text (the first paragraph) can be changed as follows: For T304 of MCG, in case of the handover from NR or intra-NR handover, or path switch from a L2 U2N Relay UE to a NR cell, or a reconfiguration with sync without performing random access procedure, or an LTM cell switch procedure, initiate the RRC re-establishment procedure; In case of handover to NR, perform the actions defined in the specifications applicable for the source RAT. Initiate the RRC re-establishment procedure if attemptLTM-Switch is not configured, or the selected cell is not one of the configured candidate cells; initiate LTM cell switch procedure, otherwise. If any DAPS bearer is configured and if there is no RLF in source PCell, initiate the failure information procedure. |  |
| Z042 | ZTE (Mengjie) | Mob | 1 | PropAgree |  |  | The current SK-CounterConfiguration-r18 includes both sk-CounterConfigToReleaseList-r18 and sk-CounterConfigToAddModList-r18. But there is no need to store ToReleaseList in the UE variable. | Only to store a list of SK-CounterConfig-r18 in the VarConditionalReconfig, e.g.: VarConditionalReconfig ::= SEQUENCE { condReconfigList CondReconfigToAddModList-r16 OPTIONAL, scpac-ReferenceConfiguration-r18 ReferenceConfiguration-r18 OPTIONAL, sk-CounterConfigurationList-r18 SK-CounterConfiguration-r18SEQUENCE (SIZE (1..maxSecurityCellSet-r18)) OF SK-CounterConfig-r18 OPTIONAL } |  |
| Z039 | ZTE (Mengjie) | Mob | 1 | PropAgree | [Ericsson-Tony] Maybe we can make the description even more generic. Will address this in the rapporteur CR. |  | The description of LTM CSI resource configuration is missing here, which can also be stored in the VarLTM-Config. | The IE VarLTM-Config is used to store the reference configuration, LTM CSI resource configuration and the LTM candidate configurations. |  |
| H034 | Huawei (David Lecompte) | Mob | 1 | PropAgree | [MediaTek] (Li-Chuan Tseng) – v133 (M009): Agreed. In VarLTM-Config, field ltm-ReferenceConfiguration-r18 is not always available. Also, the UE should be able to release the field as per clause 5.3.5.18.1: 1> else (the received LTM-Config includes ltm-ReferenceConfiguration set to release): 2> remove ltm-ReferenceConfiguration in VarLTM-Config; |  | Should be OPTIONAL | There is procedure text about if this field exists in the variable or not, as it may or may not be used while the variable is used, so it should be OPTIONAL. |  |
| M010 | MediaTek (Li-Chuan Tseng) | Mob | 1 | PropReject | [Ericsson-Tony] I think is not a good idea to have a list starting from 0 just for a UE releasing the list. These are UE variable and the ASN.1 is not normative. I guess there is no risk for a UE because ultimately it may not even use any UE variable as is described here. |  | The UE is unable to release the last LTM-CSI-ResourceConfig from VarLTM-Config, because the ltm-CSI-ResourceConfigList size starts from 1. It should start from 0. | VarLTM-Config-r18-IEs ::= SEQUENCE { ltm-ReferenceConfiguration-r18 ReferenceConfiguration-r18, ltm-CandidateList-r18 SEQUENCE (SIZE (01..maxNrofLTM-Configs-r18)) OF LTM-Candidate-r18, ltm-CSI-ResourceConfigList-r18 SEQUENCE (SIZE (1..maxNrofLTM-CSI-ResourceConfigurations-r18)) OF LTM-CSI-ResourceConfig-r18 } |  |
| H035 | Huawei (David Lecompte) | Mob | 1 | Disc |  | Huawei (to coordinate with the other interested companies). | Type not suitable for a UE variable | Contains ToAddMod/ToReleaseList fields, which should not be used for a UE variable. Will have a TP with procedure text. |  |
| M011 | MediaTek (Li-Chuan Tseng) | Mob | 1 | Duplicate | [Ericsson-Tony] See M010 |  | The UE is unable to release the last LTM-CSI-ResourceConfig from VarLTM-Config, because the ltm-CSI-ResourceConfigList size starts from 1. It should start from 0. | VarLTM-Config-r18-IEs ::= SEQUENCE { ltm-ReferenceConfiguration-r18 ReferenceConfiguration-r18, ltm-CandidateList-r18 SEQUENCE (SIZE (1..maxNrofLTM-Configs-r18)) OF LTM-Candidate-r18, ltm-CSI-ResourceConfigList-r18 SEQUENCE (SIZE (01..maxNrofLTM-CSI-ResourceConfigurations-r18)) OF LTM-CSI-ResourceConfig-r18 } |  |
| X130 | Xiaomi (Yi) | Mob | 1 | PropAgree |  |  | INTEGER is not clear enough for the UE variable. | Using “INTEGER (1..maxNrofLTM-Configs-r18-plus-1)” |  |
| M018 | MediaTek (Li-Chuan Tseng) | Mob | 1 | PropAgree |  |  | According to clause 5.3.5.18.7, the UE should be able to release the content of UE variable VarLTM-ServingCellNoResetID. | VarLTM-ServingCellNoResetID-r18-IEs ::= SEQUENCE { ltm-ServingCellNoResetID-r18 INTEGER OPTIONAL } |  |
| Z040 | ZTE (Mengjie) | Mob | 1 | PropAgree |  |  | For UE based TA measurement, we have the following agreements in RAN2#124 meeting: The UE performs TA measurements for candidate cell(s) after configured by RRC R2 assumes that the exact time the UE performs TA measurement is up to UE impl (no need to specify in R2 TS) Based on the agreement, there is no need to specify anything about the timing point of UE based TA measurement. So it’s suggested to remove “upon an LTM cell switch procedure” to avoid the confusion. | The IE VarLTM-ServingCellUE-MeasuredTA-ID is used to store the serving cell ID based on which the UE determines whether UE-based TA measurements are needed or not upon an LTM cell switch procedure. |  |
| X131 | Xiaomi (Yi) | Mob | 1 | PropAgree |  |  | INTEGER is not clear enough for the UE variable. | Using “INTEGER (1..maxNrofLTM-Configs-r18-plus-1)” |  |
| M019 | MediaTek (Li-Chuan Tseng) | Mob | 1 | PropAgree |  |  | According to clause 5.3.5.18.7, the UE should be able to release the content of UE variable VarLTM-ServingCellUE-MeasuredTA-ID. | VarLTM-ServingCellUeMeasuredTA-ID-r18-IEs ::= SEQUENCE { ltm-ServingCellUE-MeasuredTA-ID-r18 INTEGER OPTIONAL } |  |
| Z041 | ZTE (Mengjie) | Mob | 1 | PropAgree |  |  | The CG-CandidateList can also be used to transfer the candidate SCG configuration for subsequent CPAC and CHO with candidate SCG(s). So it’s suggested to add the description of subsequent CPAC and CHO with candidate SCG(s) for this IE to make the specification clearer. | Define – CG-CandidateList This message is used to transfer the SCG radio configuration for one or more candidate cells for Conditional PSCell Addition (CPA), or Conditional PSCell Change (CPC), subsequent CPAC or CHO with candidate SCG(s) as generated by the candidate target SgNB. CG-CandidateList field descriptions cg-CandidateToAddModList Contains information regarding candidate target cells to be added or modified for Conditional PSCell Addition (CPA), Conditional PSCell Change (CPC), subsequent CPAC or CHO with candidate SCG(s) from the candidate target secondary node to the master node. cg-CandidateToReleaseList Contains information regarding candidate target cells for CPA, CPC, subsequent CPAC or CHO with candidate SCG(s) to be removed from the candidate target secondary node to the master node. This list is not used in CPA, or CPC, subsequent CPAC or CHO with candidate SCG(s) preparation. |  |
| X132 | Xiaomi (Yi) | Mob | 1 | PropAgree | [Ericsson-Tony] |  | These fields a4-Threshold, hysteresis, timeToTrigger, and rsType may be the fields included in eventA4, eventA4H1, eventA4H2 and condEventA4. But only CondEvent A4 can be configured for the candidate PSCells in the case of CHO with candidate SCG(s). To avoid the confusion, the descriptions shall be changed. | This fields can include only condEventA4 releated parameters including a4-Threshold, hysteresis, timeToTrigger, and rsType. |  |
| E141 | Ericsson (Cecilia) | Mob | 1 | Duplicate | [Ericsson-Tony] See E024 |  | It doesn't seem possible for the target SN to update execution conditions for existing SCPAC configurations at PSCell change. | Could perhaps be solved in the same way as RIL E024. |  |
| E024 | Ericsson (Cecilia) | Mob | 1 | PropAgree |  |  | RAN2 agreed that SCPAC configurations are released by explicit indication. If the source SN configured intra-SN SCPAC, the target node(s) will not know that the UE has such configuration as that information is not transferred. Hence, the target node will not be able to release the configurations, if needed. | Allow conditionalReconfiguration to be included in sourceSCG-NR-Config or add the SCPAC candidate list. |  |
| S796 | Samsung (Aby) | Mob | 2 | PropReject | [Ericsson-Tony] The way how MN and SN configure L3 measurements is the same as legacy and LTM does not have an impact on this. Also, those fields are related to only L3 measurements and have nothing to do with L1 measurements. |  | MN awareness of SCG LTM to prevent capabilities are not exceeded and measurement gaps are provided | 1. CG-Config includes the NR-ARFCN and physical cell-id (PCI) of the LTM candidate cells. 2. Specify the following a. Maximum number of frequencies that could be configured for L3 measurements and LTM L1 measurments by SN is maxMeasFreqsSCG b. Maximum number of frequencies that could be configured for L3 measurements and LTM L1 measurments by SN is maxMeasFreqsSN c. Maximum number of frequencies that could be configured for L3 measurements and LTM L1 measurments by MN is maxMeasFreqsMN If a-c can't be accepted, following restrictions are necessary: d. MN configures only the frequencies it has configured for L3 measurements as the frequencies for LTM measurements. e. SN configures only the frequencies it has configured for L3 measurements as frequencies for LTM measurements | [Samsung-Aby] it is true that we never discussed if there should be any relation between L3 measurements and LTM measurement configuration. But by the way the things evolved, we think there is a need for discussion.  First of all, it is agreed in RAN4 that LTM measurements (interfrequency or intrafrequency which need gaps) can be performed using measurement gaps. And in NR-DC,MN allocates measurement gaps even for SN. Unless MN knows that LTM is configured for a cell for which the LTM measurements need gaps, it is not clear how does it allocate the measurement gaps. Alternative could be to restrict that there should be L3 measurements configured corresponding to LTM candidates cells with the same frequency layer. But we think that even this may not be sufficient, as the LTM measurement requirements from RAN4 are different from L3 measurement requirements. So the length/periodicity of the gap could be different for LTM, and it is needed (or better) for the MN to be aware of details of LTM in SCG. We also think that if LTM measurements can be configured on frequencies where L3 measurement are not configured, there should be some control of the (maximum) number of frequencies that can be configured. It may be simple to do it through existing fields as pointed in our RIL, but it could be possible through new fields also. Thus we think that we need to discuss this RIL online through t-doc. |
| Z043 | ZTE (Mengjie) | Mob | 1 | PropAgree |  |  | For subsequent CPAC, the SN may need to send the following two types of candidate cell information to the MN: the candidate cell information suggested by the source SN to the MN for the initial CPC preparation, i.e. similar to the legacy SN initiated inter-SN CPC; -- only be applicable to SN initiated subsequent CPAC the candidate cell information suggested/determined by the candidate SN to the MN for the subsequent CPC execution, i.e. the information to be included in the SubsequentCondReconfig-r18 IE. -- can be applicable to both MN and SN initiated subsequent CPAC For 1), the legacy candidateCellInfoListCPC IE can be reused to transfer such information. So the original intention to introduce the new IE candidateCellInfoListSubsequentCPC-r18 is to transfer the information 2). However, the current field description is unclear on how to use this IE for subsequent CPAC. It may cause the ambiguity that this IE is used to transfer the information from the MN or source SN, instead of from the candidate SN to the MN. | Suggest to update the field description for candidateCellInfoListCPC and candidateCellInfoListSubsequentCPC, to make it clearer on the use case of the IEs. For example: candidateCellInfoListCPC Contains information regarding candidate target cells for Conditional PSCell Change (CPC) or subsequent CPAC that the source secondary gNB suggests the target secondary gNB to consider configuring for CPC or subsequent CPAC. This filed is used in SN initiated CPC and SN initiated subsequent CPAC. candidateCellInfoListSubsequentCPC Contains information regarding candidate target cells for subsequent CPAC that the master gNB or source candidate secondary gNB suggests the target secondary master gNB to consider configuring for subsequent CPAC. This filed is used in MN initiated and SN initiated subsequent CPAC. |  |
| B104 | Lenovo (Congchi/Lianhai) | Mob | 1 | PropAgree |  |  | The CG-Config IE is sent from SN to MN. Therefore it cannot be used by MN to suggest target SN about SCPAC candidates. MN should use CG-ConfigInfo instead. | remove "master gNB or" |  |
| S797 | Samsung (Aby) | Mob | 1 | PropReject | [Ericsson-Tony] Question is if we want to optimize this. Not really sure if the LTM-config is "tens of thousands of bytes"…to be this estimation see a lot pessimistic. On the other side, if we add this restriction now, then we need to take it out anyway in Rel-19, so maybe good to not do anything. |  | Since UE doesn’t release LTM configuration autonomously, AS context in HandoverPreparationInformation may include ltm-config and target gNB may release it during handover. However as inter-Gnb LTM is not supported, there is no need to transfer entire LTM configuration which can be tens of thousands of bytes, as the purpose is just to release the LTM configuration. | Add the following clarification. - The source node shall include all fields necessary to reflect the current AS configuration of the UE, except for the fields sourceSCG-NR-Config, sourceSCG-EUTRA-Config and sourceRB-SN-Config, which can be omitted in case the source MN did not receive the latest configuration from the source SN. For RRCReconfiguration included in the field rrcReconfiguration, ReconfigurationWithSync is included with only the mandatory subfields (e.g. newUE-Identity and t304) and ServingCellConfigCommon and in this version of specification, LTM-Config is included without any subfields; | [Samsung-Aby] Size of a RRCReconfiguration message can be upto 9000\*4 (Max PDCP SDU size 9000 \* max number of segments=4) bytes. We support 8 candidates and 1 reference configuration in ltm-config signalling. So even if just consider the LTM candidate and reference configurations, the maximum size we support for LTM configuration is over 320 thousand bytes. We agree that we may not practically use this much bytes, but even if we consider 3 percentage is used, it can lead to over ten thousand bytes. Thus we think there is a case for reducing the inter-Node messaging overhead, if possible, as  ltm-config can increase the size of HandoverPreparation message manifold and HandoverPreparation could be send for each individual UE. Moreover there is no use for the target gNB  to know what is inside ltm-config, at least in R18.  We agree about the support of Inter-gNB LTM in R19, but practically, considering that we are in a later release of 5G, we think there could still be many devices or networks which may deploy only R18 LTM. So it may be better to consider this RIL also. |