Companies please share their inputs on the excel spreadsheet in ‘/tsg\_ran/WG1\_RL1/TSGR1\_106-e/Inbox/drafts/8.12.2/RRC Parameters/’.

## Inputs on version-000

Please share your inputs, if any, in the following table

|  |  |
| --- | --- |
| **Company** | **Input** |
| Qualcomm | For pucch-ConfigurationList-Multicast  Is it common by ACK/NACK-based and NACK-only-based multicast feedback?  Based on the following agreement, we support separate *PUCCH-ConfigurationList* for ACK/NACK-based and NACK-only-based multicast feedback.  Agreement:  For the separate *PUCCH-ConfigurationList* that is optionally configured to UE for NACK-only based HARQ-ACK feedback for multicast,   * + The separate *PUCCH-ConfigurationList* for multicast configuration can be a list which includes up to 2 *PUCCH-Config* configurations corresponding low priority feedback and high priority feedback, respectively.   FFS: how to handle the case when separate *PUCCH-ConfigurationList* is not configured to UE for NACK-only based HARQ-ACK feedback for multicast.  For harq-FeedbackEnabler-Multicast  A parameter for RRC-configured enabling/disabling (if no function of GC-DCI GC-DCI enabling/disabling is configured) is missing.  For the function of GC-DCI enabling/disabling, RAN1 has not decided whether to configure it per G-RNTI yet. It should be FFS for now.  For pdsch-HARQ-ACK-CodebookList-Multicast and pdsch-HARQ-ACK-Codebook-Multicast:  The following agreement is missing.  Agreement:  When UE is configured with the *pdsch-HARQ-ACK-Codebook/pdsch-HARQ-ACK-CodebookList* for ACK/NACK based feedback for multicast, it is applied to all G-RNTIs configured to UE.  For pdsch-AggregationFactor-Multicast  Does it only apply to dynamic GC-PDSCH? Or both dynamic and SPS GC-PDSCH? Or a separate *pdsch-AggregationFactor-Multicast* can be configured in a *sps-Config-Multicast*?  Note that for unicast, separate *pdsch-AggregationFactor* can be configured in PDSCH-Config and SPS-Config, respectively. If the one in SPS-Config is absent, it follows *pdsch-AggregationFactor* configured in PDSCH-Config, as specified below (in 38.331).  ***pdsch-AggregationFactor***  Number of repetitions for SPS PDSCH (see TS 38.214 [19], clause 5.1.2.1). When the field is absent, the UE applies PDSCH aggregation factor of PDSCH-Config. |
| FL’s response | @ Qualcomm  The agreement/proposal intended to focus on NACK-only and unicast, but now the agreement states it is for NACK and FFS how to handle the case when the separate one is not configured. Therefore, accordingly I added two rows to address this point. When we later on are clear how to handle the FFS, we can revisit such parameters then.  Regarding the comment that a parameter for RRC-configured enabling/disabling (if no function of GC-DCI GC-DCI enabling/disabling is configured) is missing. Actually it is reflected by “default value”. RRC either configures enable, or “listen to DCI”/dci-enabler, or by default “disabled”.  The parameters *pdsch-HARQ-ACK-Codebook/pdsch-HARQ-ACK- CodebookList* has been there in the last two rows.  *pdsch-AggregationFactor-Multicast* intended to apply to dynamic only because the agreement was made for dynamic only. It should be straightforward to extend it to SPS meaning a separate configuration for SPS but strictly we don’t have such an agreement. Even though we all agree to have a separate configuration for SPS as is for unicast, I guess we may not need to spell it out in this RRC parameter list because SPS-Config is reused for multicast, and unicast SPS and multicast SPS are configured with different SPS configuration indexes. *pdsch-AggregationFactor* has been one existing parameter in SPS-Config. |

## Inputs on version-001

Please share your inputs, if any, in the following table

|  |  |
| --- | --- |
| **Company** | **Input** |
| Apple | For parameter sps-PUCCH-AN-List-Multicast, the corresponding parameter sps-PUCCH-AN-Multicast is missing. According to below agreements, if separate sps-PUCCH-AN-List for multicast is configured, the separate sps-PUCCH-AN for multicast should be configured as well.  Agreement:  For support of ACK/NACK based HARQ-ACK feedback for SPS multicast,   * the HARQ-ACK codebook index corresponding the HARQ-ACK codebook for SPS PDSCH is included in the configuration for SPS multicast.   + UE determines a priority index from the HARQ-ACK codebook index * UE can be optionally configured a separate SPS-PUCCH-AN-List for all SPS multicast configurations. Otherwise, a common SPS-PUCCH-AN-List applies to all SPS unicast and SPS multicast configurations. |
| FL’s response | @Apple, added as Apple suggested. |

## Inputs on version-002

|  |  |
| --- | --- |
| **Company** | **Input** |
| ZTE | Regarding harq-FeedbackEnabler-Multicast, the current value range is {dci-enabler, enabled}. However, based on the yellow highlighted parts in previous agreements, it seems we need to update the value range to “{ dci-enabler, enabled, disable}”  Agreement:  Update the WA made in RAN1#105-e meeting regarding enabling/disabling HARQ-ACK feedback as follows:  Working assumption:  For enabling/disabling ACK/NACK-based HARQ-ACK feedback for RRC\_CONNECTED UE receiving multicast via dynamic group-common PDSCH:   * RRC signaling configures the enabling/ disabling function of group-common DCI indicating the enabling /disabling ACK/NACK based HARQ-ACK feedback.   + If RRC signaling configures the function of group-common DCI based indication, group-common DCI indicates (explicitly or implicitly) whether ACK/NACK based HARQ-ACK feedback is enabled/disabled   + Otherwise, enabling/disabling ACK/NACK based HARQ-ACK feedback is configured by RRC signaling.   + FFS details on RRC signaling and group-common DCI indicating. * FFS whether/how this option is extended to apply to NACK-only based feedback and multiple G-RNTI cases. * FFS the relation to the HARQ-ACK codebook types and HARQ-ACK codebook construction. * FFS the relation to the enabling/disabling ACK/NACK based HARQ-ACK feedback for retransmission. * FFS whether/how to allow UE not to react to the DCI signaling, but instead follow UE-specific RRC configuration for HARQ feedback. * FFS whether/how to apply it to SPS group-common PDSCH. * UE capability for enabling/ disabling function of group-common DCI indicating the enabling /disabling ACK/NACK based HARQ-ACK feedback is introduced and FFS details. * Note: It is up to network implementation to avoid any potential HARQ ACK mismatch between different UEs in the same multicast group |
| FL’s response | @ZTE,  Since the configuration of *harq-FeedbackEnabler-Multicast* will be optional and the default value when this parameter is absent will be discussed anyway, I formulated “disabled” as the default. I wonder whether it is ok to ZTE and if not, what is the essential difference between what you suggested and what I formulated for now? |