**3GPP TSG-RAN Meeting # 90-e RP-20xxxx**

**Electronic Meeting, 2 – 13 Nov., 2020**

**Agenda item:** 9.1.4

**Source:** RAN4 chair (Apple)

**Title:** Email discussion summary of [90E][14][RAN4\_new-baskets]

**Document for:** Information

# Introduction

In RAN#90e, an email thread [90E][14][RAN4\_new-baskets] is assigned to discuss the following three topics:

1. RP-202621: Additional NR bands for UL-MIMO
2. RP-202620: High power UE for NR TDD intra-band carrier aggregation
3. RP-202369: Handling new combos with no DL interruption for Tx switching

Alt. 1: Submit CRs to RAN4 Rel-16 FR1 RF WI maintenance or TEI16;

Alt. 2: Open a new basket WI, i.e. 2368: Down link interruption for band combinations to conduct dynamic tx switching

# Discussions and comments

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| Company | Topic #1: Additional NR bands for UL-MIMO |
| ZTE | In Rel-16, UL MIMO support for many bands such as n1, n2, n3, n7, n25, n30, n34, n38, n39, n40, n48, n66, n70, n71 were completed under the cap of the WID UE RF for FR1. Compared with this practice, just wondering what prevents us from following the same method thus would need to go for a basket method instead of the previous successful practice. |
| CMCC | In our view, MPR/A-MPR impacts to the NR bands for UL MIMO may need to be investigated. And in Rel-17 RF1 RF enhancement WI, only one example band is captured. In order to meet the deployment from different operators, we support to start a basket WI on UL MIMO support. However, if RAN plenary can give the guidance that UL MIMO support can be conducted under TEI or Rel-17 FR1 RF enhancement WI. That would be also fine. We would like to get clear guidance, so that the operators' deployment requirements can be met. |
| Qualcomm | We are OK to have a new basket to specify the UL-MIMO requirements. But we have concerns on treating it with “block approval” approach. With this approach, the requirements will not get prober attention and discussion by companies. Note that it is quite different from LTE/NR CA/DC basket items since those requirements are mostly reused from specified band combos. We would like to treat this basket as the normal WI if it gets approved. In addition, some of requesting bands in the WIDs don’t get enough supporting companies. |
| Apple | Since the proposed NR bands are for PC3 UL MIMO, we think the PC3 MPR/A-MPR for the corresponding bands can be reused. On the other hand, the requested bands in the proposed WID are all SUL bands where their corresponding NR bands have been specified for UL MIMO. Therefore, we do not think new requirements are needed for these requested SUL bands. With that said, we do not see the necessity to have a new basket WID for this purpose. |
| Samsung | Different from CA or EN-DC basket, the framework of defining UL-MIMO requirements for different bands are not clear which is still discussing in ongoing WI. Also, given the implementation of UL-MIMO features requires clear understanding on the benefit for each individual band as well as the deployment scenario. Also, we think operators request can be addressed as normal WI instead of basket WI approach. As summary, we prefer to discuss the support of UL-MIMO feature per band manner in separate WIs. |
| Skyworks | We agree with Qualcomm that these king of basket should not use block approval. MPR and AMPR requirements (if needed) are often the result of multi company effort with simulations and measurements so they require discussion papers and a combined CR. |
| Huawei | To ZTE, firstly the current proposal follows procedure, i.e., finalizing the common requirement and then handling the band specific requirement in the basket WI. Secondly, the current proposal reflects the proposal from companies in previous RAN plenary. Thirdly as companies commented above, MPR/AMPR would need be studied.    To Qualcomm, this is not a basket work item for CA. We could not use the “block approval” procedure for it. For the supporting company we have already updated it.    To Apple, it is Apple comment last time to have a basket WI. We are supposed to keep the consistency. I copied your comment last time below.    *Objective #1-1: enable UL MIMO for SUL bands*  *We propose to take one example band and define the corresponding requirements to complete the objective of the WI. The rest of interested SUL bands and the requirements are introduced in a basket WI approach (following at least a 1 quarter delay from the start of the feature discussion).*    There is no justification whether PC3 MPR/A-MPR can be directly reused.    To Samsung, I think it is difficult to discuss the support of UL-MIMO for each band one by one. It is not realistic to have separate WIs for enabling UL-MIMO for band one by one. To address your concern. We can follow the suggestion from Qualcomm, i.e., not using block approving approach and company can discuss the band needed one by one. |
| Nokia | We do not see the necessity of the basket WI for this topic. Because there are many bands supporting UL MIMO for PC3 including FDD bands. At this moment, we do not expect band specific requirements discussion. Since there are comments that at least RAN should have clear understanding on the benefit for each individual band as well as the deployment scenario, at this moment, we can check if there are any objections to discuss the introduction of UL MIMO feature into the listed bands. If not, we can discuss the proposed bands in RAN4 without the individual WID and the proposed basket WI. And if we see some band specific technical discussions in RAN4, then, we can discuss handling of UL MIMO introduction into some other bands in RAN. |
| Huawei (further comments) | Thanks for comment. For FDD bands, there was an agreed way forward triggering the discussion on MPR/AMPR. It is better to look at those requirement carefully. In our understanding,  the common work for adding UL-MIMO for SUL band is completed, and more request from operators on the additional SUL is observed. The benefit comes from the utilization of uplink MIMO. We try to include all the interested bands for UL-MIMO in checking list last RAN plenary as you said to check if there are any objections to discuss in in the WI or directly, but there is clear objection. The compromise is to have example band first and then have the rest in the basket WIDs. I do not see much value to check them again. As you can see, most companies suggested basket WI for this work last time. |
| Summary of initial round | There seems to be different opinions on the necessity of the WI. Some companies see the need for discussions on band specific MPR/A-MPR while others don’t.  It seems agreeable that for this WI, block approval should not be used.  For intermediate discussion:  Is additional work on PC3 MPR/A-MPR needed when introducing MIMO support for NR bands? More details would be encouraged. |
| Apple | Thanks for Huawei’s comments. We indeed suggested to have   a basket WID followed by the completion of an example band in last meeting. My comments in initial round are based on the expectation   that there might not be new requirements for the newly requested SUL bands   according to the outcome of the example band and the requirements for the PC3   UL MIMO bands in current specifications. However, we are also open for   further MPR/A-MPR analysis if companies think necessary. With that being   said, we are fine to have a WID to capture the band request and the   associated technical analysis. |
| CMCC | We support this baseket WID to specify bands supporting UL-MIMO. In last pleanry meeting, we already submitted CRs on SUL bands to support UL-MIMO (**RP-201750**). However, companies prefer to discuss this in Rel-17. In last RAN4 meeting, the CR on introducing UL-MIMO for the example band n80 was already approved. For the other SUL bands requested in this basket WID, the benefit to enable UL-MIMO transmission is clear, and deployment scenario is also clear (same as Rel-16 dynamic switching). Since Rel-17 FR1 RF enhancement WI only consider one example band, we need a clear guidance how to handle the other band request to meet operators' deployment requirements. We think create a basket WI is a good way to handle the following work. |
| OPPO | Ok with basket approach. |
| Huawei | There is agreed way forward in R4-2005654: study whether there is any MPR/A-MPR impacts to the newly proposed UL-MIMO operating bands, which is related to emission requirement discussion on UL-MIMO. Besides, UL MIMO maximum power requirement for band is also band specific.  Our point is that last RAN companies suggested basket WI for those bands, while in this meeting companies expressed other view. It is better for us to have a basket WI approved to meet operator request like what we did in other spectrum related topics. |
| Samsung | We think we may need to separate the discussions on supporting UL-MIMO features on SUL bands and others. It is argued that basket WI is appropriated for SUL bands give the UL-MIMO feature has been already supported in the corresponding FDD bands, i.e., with same uplink frequency range as SUL bands. |
| Skyworks | Since we also have a RAN4 agreement that UL MIMO and TxDiv should have the same MPR, once the TxDiv baseline is agreed in RAN4, should the results of this WI be also valid for TxDiv and captured at a later stage as part of the basket. Altough we talk about basket here we are not assuming that it goes via block approval if MPR/AMPR is identified as an issue |
| Huawei (response) | We would like to remove FDD band since this one lacks supporting company. Hope it can address company concern.  To Skyworks, Thanks for comments. From our side, we are fine to capture TxDiv for bands and we can update it in the future once the common requirement is completed. And we agree that this basket WI should not be subject to “block approval”. |
| Summary of intermediate round | There seems to be the following tentative agreements for final round comments:   1. It is agreeable to have this basket WI with the following scope:    1. PC3 MPR/A-MPR work if needed when introducing MIMO support for NR SUL bands    2. Scope can be updated later to capture requirements for TxDiv 2. While this is a basket WI, the usual RAN4 block approval will not apply.   Rapporteur please share the updated WID to stabilize the scope. |
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| Company | Topic #2: High power UE for NR TDD intra-band carrier aggregation |
| Skyworks | Skyworks: Questions for clarification:  ·           ・     It is unclear if this basket WI may overlap with FR1 Enhancement WI where PC2 UL CA is already covered. Also since the baseline MPR for PC2 non-contiguous UL CA is not in place yet is the related work intended within the basket or in the Release 17 FR1 enhancement WI?  ·           ・     Applicability of the basket: Since the work described is applicable to any UL CA (contiguous/non-contiguous) and power class should the basket target all intra-band UL CA cases whether contiguous or non-contiguous and whether PC3 or PC2?  ·           ・     Request table: The request should try to clarify intended architecture: for n41(2A) PC2 UL CA can be realized using two PC2 PAs (like current Release 16 PC3 n41(2A) uses two PC3 PAs). Alternatively since it is feasible to address 200MHz with 1PA and band n41 <200MHz a single PA architecture is an option but may require specific in gap requirements. Using on PA or two PA also has implications on whether UL MIMO may be supported or not in UL CA mode, may-be the basket request should provide some input on UL MIMO support or not. Please note that since we are discussing a basket approach and most band are <200MHz these question would be relevant in most cases. |
| Huawei | 1)       According to our understanding, the common requirements as well as one or two example band combination(s) need be done in FR1 enhancement WI. And the band specific requirements for more band combination with high power should be covered by a new basket WI. There would be no overlapping. The MRP requirement for PC2 non-contiguous CA as a common requirement should be discussed in the non-spectrum related WI, i.e., Rel-17 FR1 enhancement WI.  2)       The proposed high power basket WI applies for PC2 and PC1.5 for intra-band UL contiguous and non-contiguous CA.  3)       We are open to discussion on the UE architecture, which should be discussed under the FR1 enhancement as common requirements. The current request table reflects the request from operators and does not preclude any optional implementation. But we have no strong view at the current stage and would like to hear the input from other companies. |
| ZTE | Another possible way could be to use the existing RF enhancement WID as a placeholder to specify new requests for HPUE for TDD intra-band CA. |
| CMCC | We support this basket WI. Usually we take one band combination as example in regular WI and create a basket WI to meet operators' different request. Using existing WI as a placeholder seems not following MCC guidance.    Regarding the UE architecture, we also agree that this is common and should be discussed under FR1 enhancement as common requirements. |
| China Telecom | Based on our understanding of MCC guidance, only one or two example band(s) can be captured in the generic WI, and basket WI is needed for the new bands. Similar story when we split the inter-band CA and SUL PC2 WI into a generic SAR WI and a basket WI in the Sep RAN plenary meeting. |
| Qualcomm | Clarifications on that common requirements should be treated in rel-17 FR1 enhancement WI are needed. The basket should only focus on the band specific requirements. Similar concerns as above, we don’t think “block approval” approach is appropriate for this basket. |
| Oppo | Generally ok with this basket, some comments on the contents: In Rel-17 FR1 enhancement, there is only intra-band contiguous UL CA HPUE as below, but this basket WI includes also the non-contiguous UL CA HPUE. In our view, this non-contiguous first be included in Rel-17 FR1 WI first and discuss the generic issues as mentioned by Skyworks. Besides, if the PC1.5 is also targeted then it should also be specified in Rel-17 FR1 enhancement WI first and explicitly included in this basket WI. |
| Xiaomi | From our understanding, only HPUE for intra-band contiguous CA (no non-contiguous CA case) is included in the current WID on FR1 RF enhancement. Therefore we suggest that this basket WI shall be only for contiguous CA case at this stage. We understand the demand from operators, if later the general requirements for PC2 intra-band non-contiguous CA will be addressed in somewhere, this basket WID can be revised if needed. |
| Apple | We have similar question with Skyworks, if this WID is only intended for PC2 or PC1.5 intra-band UL CA, how should the PC3 intra-band UL CA combinations be requested? We do not expect the intra-band UL CA request would go through the existing NR intra-band CA basket WID. On the other hand, the WID for PC2 intra-band UL CA has just been started and substantial requirements development works are expected for PC2 alone. Therefore, we suggest to prioritizing PC2 intra-band UL CA in Rel-17 before considering PC1.5. By the way, there is also a request from LG Uplus for PC2 UL CA\_n77(2A) (RP-202635) and they propose to include this combination in the Rel-17 FR1 enhancement WID. Since the current Rel-17 FR1 enhancement WID only has intra-band contiguous UL CA as example bands, we think it is better to also have one example band for intra-band non-contiguous UL CA before introducing the basket WID. |
| Samsung | In our understanding, the setup of basket WI shall be based on the clear framework. For intra-band CA HPUE, it is better to have example band combinations (including existing continue case and newly proposed non-continue case) discussion first before RAN4 decide to have basket WI for intra-band CA HPUE |
| Skyworks (further comments) | Regarding which power classes are supported, we would think that both PC3 and PC2 should be covered.  Regarding PC1.5, as of today it is only applicable to single CC in NR. For UL CA since the assumption is equal back-off and equal PSD, 29dBm can only be reached when both CC have the same allocation BW especially for cases where each PA covers a separate CC. This needs further study on how MPR applies within the R17 FR1\_enh WI before it can be a basket approach. |
| Huawei (further comments) | To  ZTE, I think that we would follow the general procedure for the spectrum work, i.e., first we define the common requirement and then have the basket WI to finalize the band specific requirements. This is nothing new. Your comment is general, which should be applied to all the other similar proposals.    To Qualcomm, we are OK to not follow the “block approval” approach as you said these are not band combination.    To Xiaomi and Oppo, actually operators proposed to introduce the common  requirements for intra-band non-contiguous CA HPUE and PC1.5 in Rel-17 FR1 RF enhancement WI. Correspondingly, we add the intra-band non-contiguous band combination in basket WI.    To Apple, yes, the plan is to add an example for intra-band non-contiguous CA HPUE in FR1 RF requirement and the rest of proposed band combination should be captured in the basket work item.    To Samsung, the example band combination for intra-band contiguous CA is added into Rel-17 FR1 RF requirement, and will be discussed. At the same time the new request comes from operators. In our understanding, it would be better to capture those requests somewhere. |
| Nokia: | We can discuss the necessity of the basket WI after completing Rel17 NR\_RF\_FR1\_enh. Our understanding is that basket WI is the place to discuss band specific requirements after the generic requirements are completed normally with an example band. For this PC2 intra band non-contiguous CA, this objective is going to be included as one of the objectives in Rel17 NR\_RF\_FR1\_enh with an example band config of CA\_n77(2A). We may have a basket WI for this if necessary after completing the Rel17 NR\_RF\_FR1\_enh. And it would be the shortest path to focus on the generic work at this moment, since as far as we cannot finish it, the listed band config of CA\_n41(2A) also cannot be completed anyway. |
| Huawei (further comments) | We agree that we should follow the general procedure, i.e., treat the general requirement in a non-spectrum related WI and then treat the band specific requirement in basket WI. |
| Ericsson | A basket is needed for adding further combinations. The basket should reflect the scenarios for which generic requirements are defined in the RF enhancements WI. We are OK to add non-contiguous CA, but firstly an update to the generic WI is needed.  It is not urgent to start the basket right now as generic requirements are needed firstly. |
| Summary of initial round | While it seems agreeable that RAN4 needs such a basket WI, there seems to different understanding on when to start it. Also, the exact scope of this WI needs to be further clarified, e.g. the inclusion of intra-band non-contiguous CA HPUE and PC1.5 in Rel-17 FR1 RF enhancement WI.  It seems agreeable that for this WI, block approval should not be used.  For intermediate discussion:  Further clarify the scope of the WI, in relation to the updated Rel17 WI NR\_RF\_FR1\_enh |
| China Telecom | The basket WI scope should be aligned with Rel-17 FR1 WI, and can be updated if new objectives like PC1.5 and non-contiguous CA are agreed to be added Rel-17 FR1. |
| Apple | We propose to include only PC3 and PC2 intra-band UL CA in   the WI and remove the scope of PC1.5 intra-band UL CA as it may require single   PA rating > 26 dBm for unbalanced CC bandwidth as commented by Skyworks.   We also suggest to complete one PC2 intra-band NCCA example band in Rel-17   FR1 enhancement WI before the start of the basket WI. |
| CMCC | We agree the basket WI is needed. The scope should be aligned with Rel-17 FR1 RF enhancement WI. Since the common requirements still need time to be specified, whether to include intra-band non-contiguous CA HPUE and PC1.5 can be further discussed or updated when the corresponding core requirements are finliazed.  Maybe we can add some note like “the scope should be aligned with Rel-16 FR1 RF enhancement WI”. |
| OPPO | Same view as Apple. Another point is that intra-band non-contiguous was planned to be added in Rel-17 FR1 enhancement, however, it seems the extending of R17 FR1 enhancement is not allowed in this meeting, then that means the general requirements for non-contiguous UL CA will not be included in Rel-17 FR1 enhancement. |
| Qualcomm | Share the similar view as companies. The objectives of non-contiguous CA HPUE and PC1.5 should not be included before they are agreed to introduce in Rel-17 NR FR1 WI and the common requirements are completed. |
| Huawei | Thank China Telecom and CMCC for supporting.  We can add a note “the scope should be aligned with Rel-17 FR1 RF enhancement WI”    Thanks Apple suggestion.  In our view, PC3 intra-band UL CA is included in normal basket work item. So we do not need include them here. We are OK to only include PC2 for the time being (not including PC1.5 and NC CA). If the intra-band NC CA common requirement is completed, then we can update other band combination in the basket WI. |
| Samsung | We have to clarify the intension of having a basket WI without block approval/handling approach. One of important motivation of setting up the basket WI in RAN4 is to avoid too much repeating works including CRs/TPs/ works. It is better to discuss the handling approach before we decide to extent basket WI concept to other features without knowing the handling approaching.  Also, we still think including intra-band non-continuous case in FR1 UE RF shall be discussed before setup of basket WI. Whether RAN will decide to have new proposals as well add additional objectives is still ongoing discussing in this RAN in different e-mail thread |
| Ericsson | We agree the basket is needed and the scope should be scenarios for which generic requirements are defined. The note about “aligned with the Rel-17 RF enhancement WI” should be added. Also, aspects that are not currently in the scope of the RF enhancement WI (e.g. non-contiguous) should not be included in the basket in advance; the basket can be updated when they are agreed. |
| Skyworks | We do not agree that PC3 UL CA is done in band combination basket WI, this has not been the case so far. AMPR has always been done separately in a band specific WI. We do not see why there is reluctance to have a basket that cover the same type of work for all valid power class once the general requirement is available (so far only for PC3 as PC2 is only starting in FR1 WI and does not cover non contiguous nor PC1.5). in the end this is always the same companies that do the work so it is useful to keep the synergies in the same WI. |
| Huawei (response) | Thanks for comments.  1.       We agree that no block approval procedure for this WI  2.       We do not include intra-band non-contiguous CA PC2 and PC1.5 in this WI at this stage, since the common requirement is not in place.  3.       We will add the note” aligned with the Rel-17 RF enhancement WI” in the WI  4.       Thanks for Skyworks, Apple, Oppo comments, we think we misunderstood the comments. For PC3, A-MPR requirements for a certain band combination should also be captured in somewhere. So far there is no place to specify those requirements. Since it is related to AMPR and people do not expect for block approval, we would like capture PC3 AMPR requirement for intra-band CA in this basket WID. |
| Summary of intermediate round | There seems to be the following tentative agreements for final round comments:   1. It is agreeable to have this basket WI with the following scope:    1. Band specific requirements for UL contiguous CA PC2    2. Band specific A-MPR requirements for PC3 if needed    3. Do not include intra-band non-contiguous CA PC2 and PC1.5 in this WI at this stage    4. Add a note” aligned with the Rel-17 RF enhancement WI” in the WI 2. While this is a basket WI, the usual RAN4 block approval will not apply.   Rapporteur please share the updated WID to stabilize the scope. |
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| Company | Topic #3: 2369: Handling new combos with no DL interruption for Tx switching    There are two alternatives proposed.  n  Alt. 1: Submit CRs to RAN4 Rel-16 FR1 RF WI maintenance or TEI16;  n  Alt. 2: Open a new basket WI, i.e. 2368: Down link interruption for band combinations to conduct dynamic tx switching |
| CMCC | We support option1. For this DL interruption for Tx switching, there is no RF requirements related to this, only put "Yes" or "No" or "N/A" in the table. And whether to allow DL interruption for many band combinations have already been discussed and agreed in Rel-16 FR1 WI. This is different from traditional basket WI apporach. RAN4 already have so many basket WIs. In order to save the workload and efforts to maintain a basket WI, we prefer to simply submit CRs under maintenance or TEI16 to address this issue. |
| China Telecom | Based on the offline comment, for Alt. 1, Rel-17 CR instead of Rel-16 CR should be proposed considering that the Rel-16 is closed and the interruption for new combos has not been discussed before.  In this case, Alt. 2 is preferred by us in order to better organize the technical discussion, capture the release independent aspect, as well as discuss the way of indicating no DL interruption for higher order CA/DC combinations in RAN4 spec. |
| Qualcomm | We prefer Alt. 2. Having a new WI is good for discussion. Similar concerns that we don’t think “block approval” approach is appropriate for this basket. We should treat it as normal WI. |
| Oppo | For clarification, if changes to Rel-16 is not allowed then for the band combinations that do not have the explicit indication “DL interruption allowed” in 101 spec what should UE do? Does that mean for Rel-16, UEs are allowed to do interruption under these band combinations? |
| Apple | Is the basket WID intended for proponent companies to provide technical justifications as why the DL interruption is not needed during Tx switching? Or what else information are to be captured in the basket WID? By the way, which part of the specifications captures the band combinations which support dynamic Tx switching? |
| China Telecom2: | Response to OPPO:  This is an important aspect to be clarified. In our understanding, if no DL interruption is not explicitly mandated, based on the Rel-16 signaling design, UE has the freedom to report having DL interruption. Considering this, one bullet on release independence for the Rel-16 1Tx-2Tx 2CC switching scenario has been added in the WID.    Response to Apple:  Yes, the basket WI is intended to discuss whether no DL interruption can be mandated for the new combos and how to capture them in RAN4 spec.    For UE support of dynamic Tx switching, it is indicated by UE capability per UL band pair per band combination for inter-band UL CA, SUL and EN-DC, as seen in RAN4 UE feature group 7-1.   .   |  |  |  | | --- | --- | --- | | **Index** | **Feature group** | **Components** | | 7-1 | Dynamic Tx switching between two uplink carriers | 1.     Indicate support of dynamic UL Tx switching between two uplink carriers for inter-band UL CA, SUL or inter-band EN-DC    2.     Indicate the supported switching period for Tx switching between two uplink carriers in inter-band EN-DC, inter-band UL CA or SUL band combinations | |
| CATT | Prefer Alt.2. If the higher order combinations are considered, the number of request might be large and we are not sure it’s easy to be handled by TEI. |
| Summary of initial round | There seems to be more preference to Alt. 2, while further clarification on the need and scope of the WI, if Alt. is chosen, is needed.  It was also commented that for this WI, block approval should not be used.  For intermediate discussion:  Further clarify the need and scope of the WI. |
| China Telecom | For the need of the WI:  We agree Alt. 1 has its pros, and that’s why we brought both alternatives for discussion.  But as explained in the initial round, for Alt. 1, if only Rel-17 CR instead of Rel-16 CR can be proposed for the new combos, we would prefer Alt. 2, considering there are 3 aspects to be discussed (not easy to be handled by TEI):  1. Technical feasibility on not allowing DL interruption for the new combos  2. Release independence  3. Way of indicating no DL interruption for higher order CA/DC combinations, e.g., 3DL bands with 2UL bands  In Rel-16, it has been agreed to not allow interruption for some combos. Actually, it took several meeting cycles from operators proposed these combos to the final agreement on the CRs.    For the scope of the WI:  The WI targets on the DL interruption aspect. For the combos supporting Tx switching as well as the exact switching time, as we replied in the initial round, it is up to UE capability reporting. |
| CMCC | Thanks for CTC's clairifaciton. During the initial round, we prefer alt. 1, the main reason is to reduce the workload to manage the basket WIs, since there is no specific RF requirements and the spec changes are very simple. Even in Rel-16, there was not much technical discussion on how and why the proposed band combinations can allow interruption or not. And in our view, alt. 1 to allow Rel-16 CR and alt. 2 to allow release independent from Rel-16 is the same thing.  However, If companies all prefer to start a basket WI on this, we are also fine. |
| OPPO | Ok with Alt-2, i.e. basket WI. |
| Qualcomm | We are OK with Alt. 2. |
| Ericsson | Either option is possible, but the argument for option 2 seems more compelling and we are OK for that. |
| Summary of intermediate round | There seems to be the following tentative agreements for final round comments:   1. Alt. 2. is agreeable, i.e. it is agreeable to have this basket WI with the following scope:    1. Technical feasibility on not allowing DL interruption for the new combos    2. Release independence    3. Way of indicating no DL interruption for higher order CA/DC combinations, e.g., 3DL bands with 2UL bands 2. While this is a basket WI, the usual RAN4 block approval will not apply.   Rapporteur please share the updated WID to stabilize the scope. |
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# Final proposals