3GPP TSG-RAN WG1 Meeting #107-e Tdoc R1- 21XXXXX

E-meeting, November 11th – 19th, 2021

Agenda Item: 8

Source: Moderator (Ericsson)

Title: Summary of Email discussion on Rel-17 RRC parameters for LS to RAN2

Document for: Discussion, Decision

# 1 Introduction

This document summarizes the discussions in input contributions and during RAN1#107-e under the following email thread assigned by RAN1 Chair:

[107-e-R17-RRC] LS to RAN2 on updated Rel-17 RRC parameters – Sorour (Ericsson)

* Email discussion to start on November 29
* LS to RAN2 to be finalized and endorsed on December 3 (no email discussion during the quiet period of November 22 ~ 26)
* For Rel-17 RRC parameters LS, the plan is to endorse the LS by Dec 3 UTC 17:00.

There have been ongoing email discussions since Post RAN1#106-e meeting across Rel-17 WIs in order to provide the preliminary RRC parameter list for supported PHY functionalities by RAN1. The first LS [1] with Rel-17 consolidated higher layer parameters for LTE [2] and NR [3] was sent to RAN2/RAN3 post RAN1#106b-e meeting.

The discussions on RRC parameters in respecitve Rel-17 WIs were resumed in RAN1#107-e. Within this email discussion, i.e. [107-e-R17-RRC], similarly to the previous meeting, the RRC parameter lists across different WIs are merged into an Excelsheet for final review by the group and approval by Chair to be sent via an LS to RAN2/RAN3 by December 3rd.

Moreover, aiming for a consistent and efficient approach for preparing RRC parameters in RAN1, [4]was prepared and updated that suggests a set of recommendations and guidelines to achieve this goal. **As described in [4], only “stable” (not necessarily complete) RRC parameters are included in the LS to RAN2.** The remaining RRC parameters can be discussed further in RAN1 in next meetings and be included in the earleist LS to RAN2, when identified as stable.

The coordination between RRC email discussions per WI and this email discussion is considered as the following:

* The Moderator of each WI RRC email discussion [107-e-R17-RRC-WI] has provided the “WI input RRC list”. These lists are collected in an Excelsheet by the Moderator of [107-e-R17-RRC].
* The collective Excelsheet is reviewed under [107-e-R17-RRC] email discussion using section 2.1 below.
* Each WI input RRC list includes a column at the end for “Status” to identify most impotantly the “stable” rows in the list. Please note that this column is for RAN1 information only and will not be included in the LS to RAN2.

Comapnies are encouraged to consider the discussion in the following section and provide their input, if any.

# 2 Discussion

## 2.1 RRC parameter lists of Rel-17 Ws

The sub-sections below are organized for collection of comments on RRC parameters per WI. Please provide you comments, if any, for the input RRC list of a WI in the corresponding sub-section using the **latest version of Excelsheet** available at folder [Collection of RRC parameters](https://www.3gpp.org/ftp/tsg_ran/WG1_RL1/TSGR1_107-e/Inbox/drafts/8/%5B107-e-R17-RRC%5D/Collection%20of%20RRC%20parameters).

### 2.1.1 feNR-MIMO (WI code: NR\_FeMIMO)

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| **If you have any comment for a row in the Sheet corresponding to this WI, please provide your comment below by indicating the Row number.**  |
| **Company** | **Comment** |
| Moderator | In the latest version of Excelsheet:* Row: 75: Corrected Status in RAN1#106b-e to unstable. It is removed for RAN1#107e.
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| LG | On Row 8 and 10, the description would be modified by removing ‘alpha’ based on each parameter name as follows.* Description on Row 8:

UL PC parameters other than PLRS (Set of P0~~, alpha~~ and closed loop index): PUCCH* Description on Row 10:

p0\_Alpha\_CLIdSet ID (Set of P0~~, alpha~~ and closed loop index) |
| ZTE | Regarding Row-55(groupBasedBeamReportingR17), it should be marked as ‘stable’ based on the following agreement.**Agreement(RAN1#107)**Regarding how to differentiate Rel-15/16 and Rel-17 group-based beam reporting procedure,* Alt-1 (explicit): to introduce a RRC parameter groupBasedBeamReportingR17, e.g. groupBasedBeamReportingR17

Similarly, regarding Row-56(nrofReportedGroupR17), it should be marked as ‘stable’, considering above the explicit method to differentiate Rel-15/16 and Rel-17 group based beam reporting has been agreed.  |
| Moderator | **@All:** For feNR-MIMO Sheet in the next **version of Excelsheet (i.e. v006)** at folder [Collection of RRC parameters](https://www.3gpp.org/ftp/tsg_ran/WG1_RL1/TSGR1_107-e/Inbox/drafts/8/%5B107-e-R17-RRC%5D/Collection%20of%20RRC%20parameters/R1-21xxxxx%20Collection%20of%20higher%20level%20parameters%20for%20Rel-17%20LTE%20and%20NR%20-%20v005.xlsx):* Row 8 & 10: Removed “,alpha” in Column(J) as LG suggested.
* Row 55& 56: Status changed to “stable” based on ZTE comment.
* Row 96: Status changed to “stable” based on FL recommendation given the RAN1 agreements and details being up to RAN2.
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| Ericsson | Row 8 and 10: the following agreement from RAN1#105-e would seem to be applicable:**Agreement**On the setting of UL PC parameters except for PL-RS (P0, alpha, closed loop index) for Rel.17 unified TCI framework,* For each of PUSCH and PUCCH, the setting of (P0, alpha, closed loop index) can be associated with UL or (if applicable) joint TCI state per BWP.
	+ In this case, multiple settings are configured. Each setting can be associated with at least one TCI state, and, for a given TCI state, only one setting for PUSCH and only one setting for PUCCH can be associated at a time.
	+ (Working Assumption) In this case, for each of the PUSCH and PUCCH, each of the activated UL or (if applicable) joint TCI states is associated with one of the settings.
* If not associated, for each of the PUSCH and PUCCH, the setting(s) of (P0, alpha, closed loop index) per channel/signal per BWP is independent of the UL or (if applicable) joint TCI states
* FFS: If the setting of (P0, alpha, closed loop index) for SRS can also be associated with UL or (if applicable) joint TCI state.
* FFS: (to be decided in RAN1#106-e) whether to configure the same setting of (P0, alpha, closed loop index) per TCI state across channels and apply a channel dependent component, or configure a channel dependent setting of (P0, alpha, closed loop index) per TCI state

Hence, alpha should be included also for PUCCH. We would be ok to mark this as unstable for further consideration.  |
| Huawei, HiSilicon | **Row 8 and 10:** We prefer to keep “alpha” for now (following existing agreement) and check further (whether it can be removed). **Row 13:** Given that the parameter in Row 5 includes “cell” instead of “PCI indicator”, and Row 52 is for inter-cell mTRP operation only, we are not sure how can NW indicate that a CSI-RS is QCLed to a SSB with PCI different from serving cell if Row 13 is removed. We suggest keeping Row 13 for now, even if it is marked as unstable. **Row 26:** As indicated by the agreement below, “AP-SRS for BM” should be removed from the candidate values.RAN#106b-eAgreementOn Rel.17 unified TCI framework, for Rel-17 unified TCI, for DL or UL channels/signals that can share the same indicated Rel-17 TCI state as UE-dedicated reception on PDSCH/PDCCH or dynamic-grant/configured-grant based PUSCH, all of dedicated PUCCH resources (via Rel-17 MAC-CE/DCI TCI state update):* For DL: A non-UE dedicated PDCCH/PDSCH associated with the serving cell PCI or AP CSI-RS for BM or CSI (per previous agreements) sharing the same indicated Rel-17 TCI state as UE-dedicated reception on PDSCH/PDCCH (via Rel-17 MAC-CE/DCI TCI state update) is configured via RRC.
* For UL: An SRS for BM, for antenna switching, or for codebook/non-codebook based uplink transmission (per previous agreements) sharing the same indicated Rel-17 TCI state as dynamic-grant/configured-grant based PUSCH, all of dedicated PUCCH resources (via Rel-17 MAC-CE/DCI TCI state update) is configured via RRC.

Note: The details of this RRC configuration (e.g. whether via a new RRC parameter or other means) is up to RAN2. This does not imply that a new RRC parameter(s) is necessary from RAN1 point of view.FFS: Relevant UE capability to be discussed under UE feature agenda item.**Row 27:** As indicated in the agreement above, SRS can optionally follow PUCCH/PUSCH instead of PDCCH/PDSCH, with which the description should be removed. Also, for SRS for antenna switching, or for codebook/non-codebook based uplink transmission, it can be arbitrary time-domain behavior (periodic, semi-persistent, aperiodic), but for SRS for BM, it can only be aperiodic but not semi-persistent or periodic one) - see agreement below. RAN1#106-eAgreementOn Rel.17 unified TCI framework:* Aperiodic SRS resources or resource sets for BM can share the same indicated Rel-17 TCI state as dynamic-grant/configured-grant based PUSCH, all or subset of dedicated PUCCH resources in a CC
	+ FFS: Discuss if/which restriction is necessary, e.g. only for aperiodic, apply to all resources in a set
	+ Note: This doesn’t imply that all time-domain behaviours are automatically supported

RAN1#103-eAgreementOn Rel-17 unified TCI framework, to accommodate the case of separate beam indication for UL and DL:* Utilize two separate TCI states, one for DL and one for UL.
	+ FFS: Contents of separate UL TCI state
	+ Note: For FR1, UE does not expect UL TCI to provide a reference for determining common UL TX spatial filter(s), if UL TCI is supported for FR1
* For the separate DL TCI:
	+ The source reference signal(s) in M TCIs provide QCL information at least for UE-dedicated reception on PDSCH and for UE-dedicated reception on all or subset of CORESETs in a CC
* For the separate UL TCI:
	+ The source reference signal(s) in N TCIs provide a reference for determining common UL TX spatial filter(s) at least for dynamic-grant/configured-grant based PUSCH, all or subset of dedicated PUCCH resources in a CC
	+ Optionally, this UL TX spatial filter can also apply to all SRS resources in resource set(s) configured for antenna switching/codebook-based/non-codebook-based UL transmissions
* FFS: Whether the UL TCI state is taken from a common/same or separate TCI state pool from DL TCI state
	+ Note that TCI state pool for joint DL and UL beam indication is still FFS
* FFS: Whether Rel.17 supports TCI configured for single channel (e.g. PDSCH only, single CORESET)
* Note: This does not preclude the type of UE supporting only 1 beam tracking loop, i.e. UE reports value of 1 in UE FG 2-62.

**Row 53:** We think Row 53 can be removed, as the number of additional PCI(s) will be provided to UE inherently by Row 52.  |
| vivo | We are OK to remove **row 13** as the original comment says it is up to RAN2 whethere to use AdditionaPCIInfo for inter-cell mTRP. For **row 53**, since it is in square bracket and in the comment box it is says this depends on RAN2 signaling design, it is ok to keep for information to RAN2.  |

### 2.1.2 60GHz (WI code: NR\_ext\_to\_71GHz)

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| **If you have any comment for a row in the Sheet corresponding to this WI, please provide your comment below by indicating the Row number.**  |
| **Company** | **Comment** |
| Moderator | The updated list is not available yet. Moderator will announce when the list is updated. |
| Moderator | The updated list is available for review. |
| LG Electronics | Comment#1: NEW row for ssb-PositionsInBurstPlease add a new row for ssb-PositionsInBurst, according to the following RAN1 conclusion and agreement. For the agreement, at least yellow highlighted part should be captured in the comment column.Conclusion* The bit-width of ssb-PositionsInBurst in SIB1 and ServingCellConfigCommon is kept the same as in Rel-15 (i.e., 16-bits in SIB1 and 64-bits in ServingCellConfigCommon).

Agreement* If $N\_{SSB}^{QCL}$ is indicated, the same interpretation of ssb-PositionsInBurst in SIB1 or ServingCellConfigCommon as in Rel-16 is supported, i.e.:
	+ A bit set to 1 at position $k\in \{1..64\}$ indicates SS/PBCH block index k-1
	+ The UE assumes that a bit at position k > $N\_{SSB}^{QCL}$ is set to 0
		- For ssb-PositionsInBurst in SIB1, the UE assumes that a bit at *groupPresence* corresponding to a SS/PBCH block index ≥ $N\_{SSB}^{QCL}$ is set to 0
	+ Note: for ssb-PositionsInBurst in SIB1, position k corresponds to the SS/PBCH block index indicated by a bit in inOneGroup and a bit in groupPresence
* In operation with shared spectrum in 60 GHz, for ssb-PositionsInBurst in ServingCellConfigCommonSIB,
	+ for MSB k, k≥1, of inOneGroup and MSB m, m≥1, of groupPresense of ssb-PositionsInBurst:
		- if MSB k of inOneGroup and MSB m of groupPresense are set to 1, the UE assumes that SSB(s) within DBTW with ‘candidate SSB index(es)’ corresponding to ‘SSB index’ equal to k-1+(m-1)×8 may be transmitted;
		- if MSB k of inOneGroup or MSB m of groupPresense is set to 0, the UE assumes that SSB(s) within DBTW with ‘candidate SSB index(es)’ corresponding to ‘SSB index’ equal to k-1+(m-1)×8 is not transmitted;
* In operation with shared spectrum in 60 GHz, for ssb-PositionsInBurst in ServingCellConfigCommon,
	+ ssb-PositionsInBurst bits correspond to supported ‘SSB indices’,
		- and UE assumes that SSB(s) within DBTW with ‘candidate SSB index(es)’ corresponding to indicated bit(s) may be transmitted;
		- and UE assumes that SSB(s) within DBTW with ‘candidate SSB index(es)’ corresponding to not indicated bit(s) are not transmitted
* Note to spec editor: The above three bullets maintain the same behavior as Rel-16 NR-U

Comment#2: Row 29 and row 30The first main bullet needs to be added for PDSCH-*TimeDomainResourceAllocationListForMultiPDSCH-r17*, i.e., comment column in row 30. And the second main bullet needs to be added for PUSCH-*TimeDomainResourceAllocationListForMultiPUSCH-r17*, i.e., comment column in row 29.Agreement* If a UE is configured with a TDRA table in which one or more rows contain multiple SLIVs for PDSCH for DCI format 1\_1, the UE does not expect to be configured with *repetitionNumber* for the TDRA table, and if *pdsch-AggregationFactor* is configued in *PDSCH-config*, it does not apply to DCI format 1\_1.
	+ Note: *repetitionNumber* cannot be configured with *pdsch-TimeDomainAllocationListDCI-1-2* as in Rel-16.
	+ Note: Under agenda item 8.2.4, in RAN1#106-bis, it was already agreed that within the TDRA table for multi-PDSCH scheduling, the UE does not expect to be configured with the higher layer parameter *repetitionNumber*.
	+ Note: These does not preclude *pdsch-AggregationFactor* can be configured and applies to DCI format 1\_2
* If a UE is configured with a TDRA table in which one or more rows contain multiple SLIVs for PUSCH for DCI format 0\_1, the UE does not expect to be configured with *numberOfRepetitions* for the TDRA table, and if *pusch-AggregationFactor* is configued in *PUSCH-config*, it does not apply to DCI format 0\_1.
	+ Note: These does not preclude *numberOfRepetitions* is configured for TDRA table corresponding to DCI format 0\_2
	+ Note: These does not preclude *pusch-AggregationFactor* can be configured and applies to DCI format 0\_2

Comment#3: NEW row for *CG-COT-Sharing-r16*The following agreement needs to be reflected.AgreementFor CG-PUSCH to DL COT sharing, extend the duration and offset range to {1, …, 319}. |
| ZTE | We can see from the current RRC list that UE capability parameters listed in Row 23 to 26 have been captured, but there is no see “**Additional beam switching time delay**” that is also a UE capability parameter to be captured in the RRC list. So we would like to further confirm whether it is missing or for other reasons, such as it has been reflected in UE feature list, so there is no need to add it in RRC list. If it is the former, we propose to add it in the RRC list.Regarding Row 43, according to the following agreement agreed in RAN1 #107 e-meeting, we can clearly see that the value of range of CG-COT-Sharing-r17 is {1, …, 319}. But value range in Column K is FFS, so we think it should be updated as {1, …, 319}.**Agreement**For CG-PUSCH to DL COT sharing, extend the duration and offset range to {1, …, 319}. |
| Moderator | **@All:** For 60 GHz Sheet in the next **version of Excelsheet (i.e. v006)** at folder [Collection of RRC parameters](https://www.3gpp.org/ftp/tsg_ran/WG1_RL1/TSGR1_107-e/Inbox/drafts/8/%5B107-e-R17-RRC%5D/Collection%20of%20RRC%20parameters/R1-21xxxxx%20Collection%20of%20higher%20level%20parameters%20for%20Rel-17%20LTE%20and%20NR%20-%20v005.xlsx):* Row 13: New Row added based on LG (and ZTE?) comment
	+ Need confirmation from Rapporteur Jing.
* Row 29 & 30: Added the referred agreements to Column(P)
* Row 43: Updated based on ZTe and LG comment. Since the value range is actually for parameters offset and duration, the FFS in Column(K) is updated to a description for RAN2 to implement accordingly.
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| Huawei, HiSilicon | **Rows 39 and 40, Column P:**We thiunk that even in the regions that LBT is mandated, LBT/No-LBT mode should be indicated: If UE operates in an unlicensed band where LBT is mandated and LBT mode is not indicated to the UE, since unlike in FR1, licensed and unlicensed spectrums are overlapped, UE cannot know whether it is working in licensed or unlicensed band based only on the frequency location, and, therefore, does not know how to interpret the 2 bits of ChannelAcess in DCI (whether they are reserved bits or indicate channel access type).Currently, Column P in Rows 39 and 40 mentions “For regions where LBT is not mandated, gNB should indicate to the UE this gNB-UE connection is operating in LBT mode or no-LBT mode” while in the note, it is mentioned ““this gNB-UE connection is operating in LBT mode” can also be indicated to the UE in regions where LBT is mandated.”, We think “can” needs to be changed to “should” similar to the case for regions where LBT is not mandated.  |

### 2.1.3 IIoT&URLLC (WI code: NR\_IIOT\_URLLC\_enh)

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| **If you have any comment for a row in the Sheet corresponding to this WI, please provide your comment below by indicating the Row number.**  |
| **Company** | **Comment** |
| Moderator | In the latest version of Excelsheet:* Row 12&13: status for RAN1#106b-e corrected (unstable)
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| Ericsson | * For intra-UE multiplexing/prioritization related RRC parameters:
	+ Modify row 50 “UCI-MuxWithDifferentPriority” column J description: delete “for the primary PUCCH cell group” so that it is open if this RRC parameter is applicable to primary PUCCH group only, or applicable to both primary and secondary PUCCH groups. In our view, only one RRC parameter is needed to cover both primary and secondary PUCCH groups.
	+ Delete row 51, 52, 53.
		- First, we don’t think there need to be two separate RRC parameters, i.e., for primary and secondary PUCCH cell group, respectively. It is preferred that one RRC parameter can enable/disable the multiplexing on primary and secondary (if available) PUCCH group.
		- Second, there isn’t sufficient details in RAN1 agreement how dynamic indication works. We prefer to wait for more details to send RRC parameters about dynamic indication.
	+ Modify row 65 “simultaneousPUCCH-PUSCH” column J description: delete “within the primary PUCCH cell group” so that it is open if this RRC parameter is applicable to primary PUCCH group only, or applicable to both primary and secondary PUCCH groups.
	+ Delete row 66 “simultaneousPUCCH-PUSCH-secondaryPUCCHgroup”. We don’t think there need to be a separate RRC parameter for the secondary PUCCH group.
	+ Merge row 68 and 69. We think there should be a single RRC parameter to configure both cases: HP-DG vs LP-CG and LP-DG vs HP-CG.
* For propagation delay compensation related RRC parameters:
	+ Delete row 80 “dl-PRS-ResourcePower-r16”. PDC is performed in the serving cell, not neighbor cell. Thus this RRC parameter may not be necessary. Also, the value in column K is incorrect. In 37.355, the values are: INTEGER (-60..50).
	+ Typo in Note of Column P in row 76-81: “It is up to RAN2 to decide whether to copy the same thing to ~~38.311~~ 38.331”
	+ Row 73 “usage-r17” vs row 82 “SRS-PDCResourceSet-r17”: row 73 intends to reuse MIMO SRS for propagation delay compensation. In our view, this can be achieved by introducing “SRS-PDCResourceSet-r17”, where “SRS-PDCResourceSet-r17” is based on the SRS-ResourceSet for MIMO (i.e., not based on srs-PosResource for positioning), with necessary changes, e.g., define pathlossReferenceRS for PDC purpose. In summary, suggest to delete row 73, and modify row 82.
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| Samsung | For HARQ-ACK enhancement, we don’t think that row 29 “*tpc-IndexsScell-secondaryPUCCHgroup"* is needed.There is a misunderstanding that the same DCI 2\_2 is used for the PCell and the PUCCH-SCell to provide the TPC command – but it is a separate DCI; R15 wouldn’t work otherwise (e.g. PUCCH power determination in 7.2.1). |
| Nokia (WI rapporteur)  | **Related edits in magenta (in next version by Sorour)****@Ericsson on intra-UE mux**On the separate config for primary & secondary PUCCH cell group for R17 mux (rows 51 & 53): Maybe it would be better to hear other companies’ views if a joint configuration would be sufficient or not. It had been at least the thinking (during the Thanksgiving week in discussion between URLLC AI moderators), that maybe a separate configuration would be needed as the PHY priority usage is also configured per PUCCH cell group (having the 2nd PUCCH config or not). If the UE is operated with PHY priority only in one of the PUCCH cell groups, what would be the operation? Can then the R17 intra-UE mux not be configured at all (only if both have PHY priority) or would it apply then only to the PUCCH cell group that has the PHY priority operational? What is Ericsson’s take on this issue?I will mark the relevant rows for now as yellow – but let’s try to get more input from other companies (to show in next version updates by Sorour)Configuration of dynamic indication for R17 mux (row 52): We can mark this in yellow (in next version of Sorours update), let’s see what other companies think here. Clearly some RRC parameter would be needed at some point for UE capability #3, but maybe this cannot be marked as stable for now.On the separate config for primary & secondary PUCCH cell group for simult. PUCCH / PUSCH (65 & 66): Maybe it would be better to hear other companies views if a joint configuration would be sufficient or not. Similar discussed above, what if the conditions for that operation are not fulfilled for both PUCCH cell groups (e.g. PHY prioritity not operational in both PUCCH cell groups, no inter-band for both PUCCH groups available, …)? Would this mean it can only be configured if the conditions are fulfilled for both PUCCH cell groups? Or can it be configured, but if the conditions are not fulfilled for both, then only applicable for the PUCCH cell group where the condition is fulfilled (i.e. specs impact to 38.213 here, which is not nice)? So what is Ericsson’s position here?I mark this in yellow as the above (to be visible in next Sorours update), but we need to clarify this!CG/DG parameters (rows 68 & 69): Both of these parameters are in yellow already. In the earlier discussions (phase 1, during RAN1#107-e) there had been companies even thinking that there is no need for the RRC parameter at all (as based on Rel-16, this is not expected = error case, whereas a R17 UE could handle the collision also without any RRC parameter). But if we have the RRC parameter (which seems to be not needed in the first place), then would it make sense to have it both, as there is also an independent UE capability and we cannot ‘configure’ the UE with something, the UE is not supporting!? **@Ericsson on PDC – better for Chengyan /PDC moderator to comment here****@Samsung on TPC for PUCCH cell switching:** Bit puzzled about the comment. But please note, that we also have currently in the DCI format 2\_2 description the entries for PCell and PUCCH SCell (of the secondary PUCCH cell group) there and also there the entries (starting points) are independently configured. So how would this now be different for the PUCCH sSCells of primary & secondary PUCCH cell group?And don’t see that 7.2.1 would not be working, as we have agreed independent TPC loops for the different PUCCH cell groups already.Would be good to receive further input by Samsung, how this is in DCI format 2\_2 usage for primary & secondary PUCCH cell group (in 38.212 and overall)No changes currently proposed before receiving further clarification on the Samsung worries.  |
| Huawei (PDC feature lead) | Related edits in magenta (in next version by Sorour)@Ericsson on PDC1. On row 80, it is not clear to me that it is only for neighbor cell. My originally understanding is that even for the serving cell, DL PRS can be considered as the pathloss reference cell also, especially if we use DL PRS for UE Rx-Tx measurement. Of course, if not needed, gNB can just configure other signal like SSB or TRS as the pathloss reference cell. Let’s hear more views from companies though. Anyway, since the row is in yellow, let’s keep it for now to leave more time for us to check.

By the way, I updated the value range as you suggested (to be visible in next Sorours update). 1. On your comment on the typo in row 76-81, it will be updated in next update (to be visible in next Sorours update).
2. On your comment on row 73, since it is related to whether to support SRS for positioning for PDC (e.g. depending on whether to support SRS for positioning, we need to decide whether to support DL PRS as pathloss reference for CSI-RS for PDC), let me mark row 73 in yellow for now, and further update can be done based on the outcome of whether to support SRS for positioning for PDC. (to be visible in next Sorours update)

**@ all on PDC**If you look at the comments on RRC parameter list, you could see that whether/how to update this RRC parmaeters depending on whether to support SRS for positioning for PDC. Based on the disucsison on UE features, a few companies shared the views it is not supported. However, more views are needed before making the decision. It will be appreciated if you can provide your views on the question below:**Question**: **Do you agree to conclude that “SRS for positioning for RTT-based PDC is not supported in Rel-17”?**

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| *Company* | *View* |
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| Moderator | Thanks Rapporteure (Klaus) and FL (Chengyan) for providing detailed explanaitons.On TPC for cell switching, Samsung indicated on Reflector to dismiss the comment. Thanks Samsunng!**All:** For IIoT&URLLC Sheet in the next **version of Excelsheet (i.e. v006)** at folder [Collection of RRC parameters](https://www.3gpp.org/ftp/tsg_ran/WG1_RL1/TSGR1_107-e/Inbox/drafts/8/%5B107-e-R17-RRC%5D/Collection%20of%20RRC%20parameters/R1-21xxxxx%20Collection%20of%20higher%20level%20parameters%20for%20Rel-17%20LTE%20and%20NR%20-%20v005.xlsx):* Intra-UE mux: Please see the comments by Rapporteure (Klaus) on the following rows and provide feedback if any.
	+ Row 51, 52, 53, 65, 66, 68, 69 are updated.
* PDC:
	+ The updates indicated by FL based on Ericsson’s comments are implemeted.
* **@All: Please review the discussion by FL (Chengyan) and provide feedback.**
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| Intel | Regarding PDC related comments from Moderator (Chengyan), on the question to support “SRS for positioning”, we feel that it is better to leave this question open and decide in the next RAN1 working group meeting. We may be fine with eventually supporting SRS for positioning, but further checking of potential issues/details is desirable. |
| Nokia/NSB | We would be fine in principle to support also the “SRS for positioning” but then only in combination with PRS (and not CSI-RS for tracking / TRS). Just from simplicity point of view: a UE supporting positioning would support the PRS & SRS for positioning, but a UE not supporting the positioning most probably would not support the “SRS for positioning” either. And the combination of CSI-RS for tracking (i.e. TRS) and “normal SRS” should be working just fine.  |
| Ericsson2 | * For intra-UE multiplexing/prioritization related RRC parameters:
	+ On the separate config for primary & secondary PUCCH cell group for R17 mux (rows 51 & 53): In our view the configuration for R17 mux can be similar to *lch-BasedPrioritization*, which is part of mac-CellGroupConfig, and configures for a MAC entity of the given cell group (MCG or SCG). Row 50 “UCI-MuxWithDifferentPriority” is part of physicalCellGroupConfig, and configures for the given cell group also. We don’t see a use case that two PUCCH cell group under a given cell group need to have different UCI-MuxWithDifferentPriority while sharing one *lch-BasedPrioritization*. If the logical channels need to serve URLLC/IIoT data, then the MAC configuration and PHY configuration should be configured in a consistent way for a given MAC entity regardless of primary or secondary PUCCH group.
	+ On the separate config for primary & secondary PUCCH cell group for simultaneous PUCCH / PUSCH (row 65 & 66): we are fine to further check if it is problematic to have a joint configuration. Our view is that the configuration applies to one or both PUCCH cell groups whenever the condition is fulfilled (i.e., different priorities + inter-band CA).
	+ On CG vs DG parameters (rows 68 & 69): we are also fine with no RRC parameter at all. In this case, the Release-xx the UE implements (Rel-16 vs Rel-17) differentiates if the UE handles the case of overlapping DG vs CG where both have MAC PDUs.
* For propagation delay compensation related RRC parameters:
	+ For row 80 “dl-PRS-ResourcePower-r16”: Agree that PRS can be used as reference RS as well, e.g., for PDC SRS. The comment is about the way the power of PRS was signalled. in our view the reason that abosolute value of EPRE for PRS was signaled is because UE need to receive PRS from neighbor cells. For PRS for PDC, the power of PRS can be provided relative to another DL signal in the serving cell, similar to other DL RS (e.g., CSI-RS, PTRS), See below, also see 38.214 section 4.1.

NZP-CSI-RS-Resource ::= SEQUENCE {…powerControlOffsetSS ENUMERATED{db-3, db0, db3, db6} OPTIONAL, -- Need R …}Thus, for row 80, one way is to replace it with powerControlOffsetSS, similar to that for NZP-CSI-RS.* + For the question “SRS for positioning for RTT-based PDC is not supported in Rel-17”: actually SRS for positioning and SRS for MIMO are very similar, only minor differences like pathlossReferenceRS and spatialRelationInfo. But for PDC, pathlossReferenceRS and spatialRelationInfo need to be specifically defined for PDC SRS also. Thus it’s more like neither SRS for MIMO nor SRS for positioning can be directly reused. To avoid taking away SRS resource for MIMO (reduce maxNrofSRS-ResourceSets by 1 for MIMO), thus we recommend to separately define an SRS IE for PDC.
 |

### 2.1.4 NR-NTN (WI code: NR\_NTN\_solutions)

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| **If you have any comment for a row in the Sheet corresponding to this WI, please provide your comment below by indicating the Row number.**  |
| **Company** | **Comment** |
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### 2.1.5 Positioning (WI code: NR\_pos\_enh)

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| **If you have any comment for a row in the Sheet corresponding to this WI, please provide your comment below by indicating the Row number.**  |
| **Company** | **Comment** |
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### 2.1.6 RedCap (WI code: NR\_redcap)

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| **If you have any comment for a row in the Sheet corresponding to this WI, please provide your comment below by indicating the Row number.**  |
| **Company** | **Comment** |
| ZTE | Different with the legacy UE, the RRC configured BWP bandwidth is no more than the maximum RedCap UE bandwidth for RedCap UE. Therefore, a corresponding parameter is also needed and the bandwidth limitation should be added in the description column. |
| Ericsson (WI rapporteur) | Regarding ZTE’s comment, it seems that the existing (legacy) parameter can be reused, and that the only change needed is a clarification in the parameter description field in 38.331, or do you foresee some other required change? |
| Moderator | **@ZTE:** Please follow-up on the comment by Rapporteure. Thanks! |
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### 2.1.7 Power saving (WI code: NR\_UE\_pow\_sav\_enh)

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| **If you have any comment for a row in the Sheet corresponding to this WI, please provide your comment below by indicating the Row number.**  |
| **Company** | **Comment** |
| Ericsson | Row#10 : The maximum number of TRS resource sets =64 should be reflected in the value range (column K)and below agreement should be captured in comment (column P). ***Agreement****For the maximum number of TRS resource sets configured by higher layer, X,** *X = 64*
* *FFS: the number of configured TRS resource sets is not larger than the number of actual transmitted SSBs determined according to ssb-PositionsInBurst in SIB1*

Row#21 : This row should be stable with corresponding agreement listed in column P –not clear why it is labelled unstable? Row#26 : This row should be stable with corresponding agreement listed in column P – not clear why it is labelled unstable?  |
| Moderator | **@All:** For Power saving Sheet in the next **version of Excelsheet (i.e. v006)** at folder [Collection of RRC parameters](https://www.3gpp.org/ftp/tsg_ran/WG1_RL1/TSGR1_107-e/Inbox/drafts/8/%5B107-e-R17-RRC%5D/Collection%20of%20RRC%20parameters/R1-21xxxxx%20Collection%20of%20higher%20level%20parameters%20for%20Rel-17%20LTE%20and%20NR%20-%20v005.xlsx):* Row 9: Updated to capture X=64 based on the coment by Ericsson fro Row 10.
* Row 21: Updated for alignment with draft CR 38.214
* Row 21 & 26: Status is changed to “stable” based on comments by Ericsson.
* Typo corrected (specific->specific)
 |
| Ericsson2 | Row#4 ([payloadSizeDCI\_format2\_7]) : The value range should be updated to {1, 2, 3, …, ~~41~~ 43}. This is to reflect the maximum Paging DCI size considering unlicensed spectrum also, where there are two additional reserved bits compared to licensed spectrum (From 38.212, DCI 1\_0 with P-RNTI, *Reserved bits –  8 bits for operation in a cell with shared spectrum channel access; otherwise 6 bits*) |

### 2.1.8 Coverage (WI code: NR\_cov\_enh)

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| **If you have any comment for a row in the Sheet corresponding to this WI, please provide your comment below by indicating the Row number.**  |
| **Company** | **Comment** |
| Sharp | Row#3:“Note: If this field is present, repK field is absent” should be replaced by “Note: If this field is present, UE shall ignore repK (without suffix)”, because the existing repK field is mandatory present and as such cannot be absent. |
| Huawei, HiSilicon | Add a new row #17 for the following agreement to support TBoMS with both type 1 and type 2 configured grant.RAN1#106-eAgreementTBoMS is supported for both configured grant and dynamic grant.

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| NR\_cov\_enh-Core | TB processing over multi-slot PUSCH |   |   |   |   | *numberOfSlotsTBoMS\_ConfiguredPUSCH-r17* | new |   | Number of slots allocated for TB processing over multi-slot PUSCH for both Type 1 and Type 2 configured grant (see TS 38.214 [X], clause 6.1.2.3) | 1, 2, 4, 8 |   | Per UE, Parent IE: ConfiguredGrantConfig | UE-specific | 38.331 | AgreementTBoMS is supported for both configured grant and dynamic grant. AgreementAt least the following values are supported in Rel-17 for the number N of allocated slots for the single TBoMS:• {2,4,8}FFS: whether N=1 is also supported depends on how TBoMS transmission feature is enabled (or disabled)FFS: other values, if any.FFS: further constraints on N\*M  |

Row#3: Agree on Sharp’s comment. Additionally, in column #M, “in ConfiguredGrantConf” should be replaced with “in ConfiguredGrantConfig” |
| Nokia/NSB | **Row#3:**The above suggestion from Sharp looks good to us.**Rows #8, #9, #12, #13:**These rows are not using the same terminoly. Some rows are using “nominal time domain window”, while the others are using “configured time domain window”. Given that “nominal time domain window” is currently used in the CR for TS 38.214, we suggest taking the same terminology here and align across the descriptions in these rows, i.e., changing “configured time domain window” to “nominal time domain window”, when applicable. **Concerning the comment above from Huawei/HiSi on adding a new parameter:** We do not agree to add it. It was agreed that the number of slots for TBoMS (N) is determined by using a row index of a TDRA list, whereas the number of repetitions of TBoMS is indicated by numberOfRepetitions in a column of Rel-17 TDRA table. However, there was no consensus in RAN1 to add new columns for N and M in Rel-15 TDRA table. Therefore, whether and how to support Type-1 CG for TBoMS could be discussed in another context but it should not be handled in the RRC parameter discussion. |
| Moderator | **@All:** For Coverage Sheet in the next **version of Excelsheet (i.e. v006)** at folder [Collection of RRC parameters](https://www.3gpp.org/ftp/tsg_ran/WG1_RL1/TSGR1_107-e/Inbox/drafts/8/%5B107-e-R17-RRC%5D/Collection%20of%20RRC%20parameters/R1-21xxxxx%20Collection%20of%20higher%20level%20parameters%20for%20Rel-17%20LTE%20and%20NR%20-%20v005.xlsx):* HW comment for adding new row: Based on comment from Nokia, Moderator suggests not to add a new row in this list. The corresponding discussion can continue in next RAN1 meeting if needed.
* Row 3: Updated based on Sharp’s suggestion. Typo corrected as HW indicated.
* Row 8: ‘configured’ changed to ‘nominal’ based on Nokia’s comment for consistency with spec.
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### 2.1.9 UL Tx switching (WI code: NR\_RF\_FR1\_enh-Core)

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| **If you have any comment for a row in the Sheet corresponding to this WI, please provide your comment below by indicating the Row number.**  |
| **Company** | **Comment** |
| Moderator | New list. No list in the previous LS [1] |
| Moderator | In the latest version of Excelsheet:* Row 2: Changed color (blue) due to being new parameter .
 |
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### 2.1.10 Small data (WI code:NR\_SmallData\_INACTIVE-Core)

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| **If you have any comment for a row in the Sheet corresponding to this WI, please provide your comment below by indicating the Row number.**  |
| **Company** | **Comment** |
| Moderator | New list. No list in the previous LS [1] |
| Moderator | In the latest version of Excelsheet:* Changed color (blue) due to being new parameter .

**@All:** SDT Rapporteur had kidnly provided some clarification on the list and unstable parameters for companies to check to be included when this email discussion was kcked-off, that was unfortunately missed by Moderator. Please review the commnts below and provide feedback. |
| SDT Rapporteur(ZTE) | Compared with v07 by the end of 107-e meeting, this version has the following changes:* Add a Column Q for status, the highlighted parameters are now labeled as unstable
* Move Row 62~64 to the beginning of the list
* Remove green background color for all parameters

Regarding the unstable parameters, at least some of them are not controversial, we can try to make them stable during this week and send a complete list to RAN2, so we have the following clarification and suggestions:Row 10, 11, 16, 17 repK, repK-RV, pusch-RepTypeIndicator-r16, frequencyHoppingPUSCH-RepTypeB-r16: These parameters are repetition related, since RAN1 still cannot reach consensus on repetitions, it can be up to RAN2 to decide whether repetition is needed from signaling perspective, as for physical layer design, such as how to treat them for mapping, whether to restrict equal number of actual repetitions can still be discussed in RAN1. If this suggestion can be accepted, these parameters can be stable to replace the original note with “It’s up to RAN2 to decide whether this parameter is needed”.Row 12 antennaPort: In normal CG configuration, antenna port is used for UE to select the corresponding DMRS ports, if multiple DMRS ports are selected, these are used for multi-layer transmission. However, in CG-SDT, only single layer transmission is allowed, and multiple DMRS ports can be configured for mapping, so this parameter can be reinterpreted as the subset of DMRS ports for mapping. This seems to be the simplest way to achieve the CG-SDT functionality by re-interpreting existing parameter, if companies can provide other choices, we are open to it.Row 13 precodingAndNumberOfLayers: Since CG-SDT only supports single layer transmission, this parameter actually is not useful, but considering that this is the existing parameter in CG configuration, and RAN2 may reuse the CG configuration structure, we slightly prefer to reuse it and modify the description to say that this parameter is always 1 for CG-SDT. If companies have concern, we can add a note in Column P “It’s up to RAN2 to decide whether this parameter is needed”.Row 14 srs-ResourceIndicator: For normal CG, SRI is used to indicate UE to select the UL beam. However, for CG-SDT, if SRI can be configured, it will be indicated in RRC release messages when UE enters inactive state, then gNB doesn't know when UE will trigger a CG-SDT, it might be after quite long time, so the beam indication may be inaccurate, UE may not know whether to determine UL beam based on the SRI from gNB or selected SSB, and obviously the latter one is more accurate. Row 24 uci-OnPUSCH: For CG-SDT, UE may transmit PUCCH and CG PUSCH simultaneously, so this parameter may be useful some time. It should be fine with the note to ask RAN2 to make decision whether this parameter can be used for CG-SDT.Row 33 dmrs-SeqInitialization: In Column P, the corresponding agreement implies that there might be multiple DMRS sequences for CG-SDT, however, we haven’t make an explicit agreement on whether and how to allow DMRS sequences. If companies have consensus to reuse the method of MsgA PUSCH to generate 2 sequences, it would be fine to reinterpret this parameter to allow to configure 0 and 1. If that’s not the common understanding, we may need to further discuss it.Companies are encouraged to check whether the above explanation on unstable parameters are reasonable, and also to check the stable parameters to see if there is any misunderstanding, thanks! In addition, we have 2 more questions to check companies’ views, the decision of these questions may also have RRC parameter impact.Q1: We haven’t discussed CORESET for CG-SDT before, do you think it should be UE specific CORESET or common CORESET?Q2: It seems possible that dynamic grant would be used for subsequent data transmission for CG-SDT, in case of DG transmission, do you think UE specific PUSCH/PDSCH configuration is needed? Or common PUSCH/PDSCH(similar as Msg2/3/4) is enough? |
| Intel | For Row 37, as we commented during email discussion, priority indication for CG-PUSCH during CG-SDT is not needed. We suggest to put “phy-PriorityIndex-r16” in [] and unstable. For other unstable parameters, we are fine to further discuss it.  |
| ZTE | Agree with Intel that this parameter in Row 37 is not needed, it’s fine to change it to “unstable”, we can also add a note to replace the original one to say “This parameter is not applicable for CG-SDT”. |
| Moderator | **@All:** For Small data Sheet in the next **version of Excelsheet (i.e. v006)** at folder [Collection of RRC parameters](https://www.3gpp.org/ftp/tsg_ran/WG1_RL1/TSGR1_107-e/Inbox/drafts/8/%5B107-e-R17-RRC%5D/Collection%20of%20RRC%20parameters/R1-21xxxxx%20Collection%20of%20higher%20level%20parameters%20for%20Rel-17%20LTE%20and%20NR%20-%20v005.xlsx):* Row 37: Status changed to ’unstable’ based on Intel and ZTE comment. The topic can be furhter discussed in next RAN1 meeting if needed.
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### 2.1.11 NB-IoT&eMTC (WI code: NB\_IOTenh4\_LTE\_eMTC6)

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| **If you have any comment for a row in the Sheet corresponding to this WI, please provide your comment below by indicating the Row number.**  |
| **Company** | **Comment** |
| ZTE | For row 7(enable16QAM-ul in PUR-config-NB) and 8 (enable16QAM-dl in PUR-config-NB), the spec impact is not only related to 36.211, 36.213, but also related to 36.212, since the PUR-RNTI scrambled DCI would be affected. So for the column “RAN1 specification”, it should be “36.211, 36.212, 36.213” |
| Moderator | **@All:** For NB-IoT&eMTC Sheet in the next **version of Excelsheet (i.e. v006)** at folder [Collection of RRC parameters](https://www.3gpp.org/ftp/tsg_ran/WG1_RL1/TSGR1_107-e/Inbox/drafts/8/%5B107-e-R17-RRC%5D/Collection%20of%20RRC%20parameters/R1-21xxxxx%20Collection%20of%20higher%20level%20parameters%20for%20Rel-17%20LTE%20and%20NR%20-%20v005.xlsx):* Row 7 & 8: 36.212 is added to Column C
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### 2.1.12 eIAB (WI code: NR\_IAB\_enh)

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| **If you have any comment for a row in the Sheet corresponding to this WI, please provide your comment below by indicating the Row number.**  |
| **Company** | **Comment** |
| ZTE | For Row#3:According to the agreement of R1#106bis-e, it is clear that the configuration of N would not be coupled with MT’s RBG, it is also not clear which BWP in which MT CC the so called ‘RBG’ is referenced to. To avoid misleading to RAN3, the following whole text should be removed from the value range column.* ~~[N is at least the # PRBs corresponding to the MT’s configured #PRB of an RBG]~~
 |
| Moderator | **@All:** For eIAB Sheet in the next **version of Excelsheet (i.e. v006)** at folder [Collection of RRC parameters](https://www.3gpp.org/ftp/tsg_ran/WG1_RL1/TSGR1_107-e/Inbox/drafts/8/%5B107-e-R17-RRC%5D/Collection%20of%20RRC%20parameters/R1-21xxxxx%20Collection%20of%20higher%20level%20parameters%20for%20Rel-17%20LTE%20and%20NR%20-%20v005.xlsx):* Row 3: Column K is updated as suggested by ZTE.
	+ Please comment if views are different.
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### 2.1.13 Sidelink (WI code: NR\_SL\_enh)

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| **If you have any comment for a row in the Sheet corresponding to this WI, please provide your comment below by indicating the Row number.**  |
| **Company** | **Comment** |
| ZTE | **Row #15:** Considering the note in agreement, this field may not be configured, i.e. it should be configured in some cases. So we propose the following sentence should be added in field description: This field is present only when the field ‘rbSetPSFCHScheme2’ is configured.**Row #16:** Regarding Alt 1 is a Work Assumption, we think the field ‘containerScheme1’ is not stable till now, it should be [containerScheme1] with brackets. And the value range is not quite consistent with the agreement. In agreement, MAC-CE should be always used, and 2nd SCI can be additional used in some cases, but with the value ‘MAC CE or 2nd SCI’, in our understanding, it implies that 2nd SCI can be solely used in some cases. But this case is now allowed under this agreement.**Row #14:** Regarding the Work Assumption listed in Column P, and another Work Assumption achieved in RAN1#107e as below, we believe this issue should be discussed in next meeting, so we think this filed is not stable, and it should be [typeUEAScheme2].**Working Assumption**For Condition 2-A-1 in Scheme 2, when “a non-destination UE of a TB transmitted by UE-B can be UE-A” is enabled or when “a non-destination UE of a TB transmitted by UE-B can be UE-A” is disabled and the destination UE of the conflicting TBs is UE-A, for each pair of UEs scheduling the conflicting TBs, a UE with the higher priority value is UE-B.* FFS whether/how to set additional condition for UE-A to send PSFCH.
* Conclude on whether/how to handle, or differently handle, the case when at least one of UEs scheduling conflicting TBs doesn’t support Scheme 2 at the subsequent meetings
 |
| Moderator | **@All:** For SL Sheet in the next **version of Excelsheet (i.e. v006)** at folder [Collection of RRC parameters](https://www.3gpp.org/ftp/tsg_ran/WG1_RL1/TSGR1_107-e/Inbox/drafts/8/%5B107-e-R17-RRC%5D/Collection%20of%20RRC%20parameters/R1-21xxxxx%20Collection%20of%20higher%20level%20parameters%20for%20Rel-17%20LTE%20and%20NR%20-%20v005.xlsx):* Row 15: Added to Column J “This field is present only when the field ‘rbSetPSFCHScheme2’ is configured.”
	+ Please comment if views are different.
* Row 14 & 16: Status changed to 2unstable”. Itcan be further discussed in next RAN1 meeting if needed.
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### 2.1.14 MBS (WI code: NR\_MBS)

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| **If you have any comment for a row in the Sheet corresponding to this WI, please provide your comment below by indicating the Row number.**  |
| **Company** | **Comment** |
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### 2.1.15 DSS (WI code: NR\_DSS)

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| **If you have any comment for a row in the Sheet corresponding to this WI, please provide your comment below by indicating the Row number.**  |
| **Company** | **Comment** |
| Moderator | In the latest version of Excelsheet:* Corresponding meetings/colors corrected.
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### 2.1.16 MR-DCs Scell Act (WI code: LTE\_NR\_DC\_enh2)

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| **If you have any comment for a row in the Sheet corresponding to this WI, please provide your comment below by indicating the Row number.**  |
| **Company** | **Comment** |
| Moderator |  Place holder. No list yet to be included in the upcoming LS. |
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### 2.1.17 IoT NTN (WI code: LTE\_NBIOT\_eMTC\_NTN)

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| **If you have any comment for a row in the Sheet corresponding to this WI, please provide your comment below by indicating the Row number.**  |
| **Company** | **Comment** |
| Moderator | The updated list is not available yet. Moderator will announce when the list is updated. |
| Moderator | The updated list is available for review. |
| Moderator | In the latest version of Excelsheet:* Row 23 & 48: removed.
* Row 22 & 47: updated.
 |
| Moderator | **@All:** For IoT-NTN Sheet in the next **version of Excelsheet (i.e. v006)** at folder [Collection of RRC parameters](https://www.3gpp.org/ftp/tsg_ran/WG1_RL1/TSGR1_107-e/Inbox/drafts/8/%5B107-e-R17-RRC%5D/Collection%20of%20RRC%20parameters/R1-21xxxxx%20Collection%20of%20higher%20level%20parameters%20for%20Rel-17%20LTE%20and%20NR%20-%20v005.xlsx):* Row 2 & 26: Removed.
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### 2.1.18 5G-Broadcast (WI code: LTE\_terr\_bcast\_bands\_part1)

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| **If you have any comment for a row in the Sheet corresponding to this WI, please provide your comment below by indicating the Row number.**  |
| **Company** | **Comment** |
| Moderator | No change in the list since the previous LS [1] |
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## 2.2 Draft LS to RAN2 on RRC parameters

A draft for LS to RAN2 is provided and available at folder [Draft LS](https://www.3gpp.org/ftp/tsg_ran/WG1_RL1/TSGR1_106b-e/Inbox/drafts/8/%5B106bis-e-R17-RRC%5D/Draft%20LS). Please provide your comments, if any, on the **latest version of draft LS**. Your review, specially from 20th of Oct. ia very appreciated.

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| **Company** | **Comment** |
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## 2.3 Improve RRC parameters preparation activity

The document in [4] is an attempt to address our challenges in RAN1 for the task of RRC parameters preparation based on our previous experiences. Please consider this section to share your questions, comments and suggestions that could help to further improve our WoW within RAN1, as well as inter-action with RAN2 with respect to RRC parameter preparation. The more we know, the more we can improve. Thank You!

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| **Company** | **Comment** |
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# 3 Conclusion

TBD

# 4 References

1. R1-2110575 LS on Re-17 LTE and NR higher-layers parameter list; RAN1
2. R1-2110572 Consolidated higher layers parameter list for Rel-17 LTE; RAN1
3. R1-2110573 Consolidated higher layers parameter list for Rel-17 NR; RAN1
4. R1-2111193 Recommendations for RAN1 RRC Parameter Preparation; Moderator (Ericsson)