**3GPP TSG-RAN WG1 Meeting #108-e R1-2202757**

E-meeting, February 21st – March 3rd, 2022

Title: DRAFT LS on updated Rel-17 LTE and NR higher-layers parameter list

Response to: -

Release: Rel-17

Work Item: NR\_feMIMO, NR\_ext\_to\_71GHz, NR\_IIOT\_URLLC\_enh, NR\_NTN\_solutions, NR\_pos\_enh, NR\_redcap, NR\_UE\_pow\_sav\_enh, NR\_cov\_enh, NR\_IAB\_enh, NR\_SL\_enh, NR\_MBS, NR\_DSS, LTE\_NR\_DC\_enh2, NR\_RF\_FR1\_enh, NR\_SmallData\_INACTIVE, NB\_IOTenh4\_LTE\_eMTC6, LTE\_NBIOT\_eMTC\_NTN, LTE\_terr\_bcast\_bands\_part1

Source: RAN WG1

To: RAN WG2, RAN WG3

Cc: RAN WG4

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**Send any reply LS to: 3GPP Liaisons Coordinator,** **mailto:3GPPLiaison@etsi.org**

Attachments: R1-2202759 (Consolidated higher layers parameter list for Rel-17 NR)

**R1-2202758 (Consolidated higher layers parameter list for Rel-17 LTE)**

**1. Overall Description:**

RAN1 has further updated the list of new higher layers parameters and updates on the existing higher-layer parameters for the Rel-17 work items.

RAN1 would like to clarify the following regarding the attached lists:

* The updates in the list as compared to the lists attached with R1-2202542 are highlighted in blue.
* In addition, RAN1 may see the need for additional update of the higher layer parameters. RAN1 will continue working on consolidating them and will share the corresponding updates with RAN2 and RAN3 in the next LS if needed.
* RAN1 understands that RAN2 and RAN3 can modify the RAN1 higher layers parameter list for the purpose of proper implementation of the functionalities, when needed.

For Enh. IIoT and URLLC WI, Row 60 and Row 61 are removed but the indication of the removal is missing in R1-2202542 which is handled in this LS to track properly the changes throughout the LS exchanges.

Additionally, RAN1 would like to inform RAN2 and RAN3 about the following agreements made in RAN1#108-e meeting for NR MBS WI:

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| **NR MBS WI:****Agreement**Send an LS to inform RAN2 that the following parameters are NOT needed for PDSCH-Config-Multicast:* *zp-CSI-RS-ResourceToAddModList, zp-CSI-RS-ResourceToReleaseList*

**Agreement**For multicast RRC\_CONNECTED UEs, *p-ZP-CSI-RS-ResourceSet* can be configured in *PDSCH-Config-Multicast* for GC-PDSCH rate matching, subject to UE capability. For PDSCH resource mapping with RE symbol level granularity,* the REs indicated by *p-ZP-CSI-RS-ResourceSet* configured in *PDSCH-Config-Multicast* are declared as not available for GC-PDSCH.
* *p-ZP-CSI-RS-ResourceSet* configured in *PDSCH-Config* for unicast do not apply for GC-PDSCHs.
* *p-ZP-CSI-RS-ResourceSet* in *PDSCH-Config-Multicast* for multicast do not apply for unicast PDSCHs.
* The total number of *p-ZP-CSI-RS-ResourceSet* that a UE can be configured with is the same as for unicast in Rel-16

Also include this agreement in an LS to RAN2.**Agreement**For multicast RRC\_CONNECTED UEs, *sp-ZP-CSI-RS-ResourceSetsToAddModList* can be configured in *PDSCH-Config-Multicast* for GC-PDSCH rate matching, subject to UE capability. For PDSCH resource mapping with RE symbol level granularity,* the REs indicated by *sp-ZP-CSI-RS-ResourceSetsToAddModList* configured in *PDSCH-Config-Multicast* are declared as not available for GC-PDSCH when their activation delivered by unicast PDSCH is applied.
* *sp-ZP-CSI-RS-ResourceSetsToAddModList* configured in *PDSCH-Config* for unicast do not apply for GC-PDSCHs.
* *sp-ZP-CSI-RS-ResourceSetsToAddModList* in *PDSCH-Config-Multicast* for multicast do not apply for unicast PDSCHs.
* The total number of semi-persistent *ZP-CSI-RS-ResourceSet* that a UE can be configured with is the same as for unicast in Rel-16

Also include this agreement in an LS to RAN2.**Agreement**Update the previous agreement for *p-ZP-CSI-RS-ResourceSet* as below:For multicast RRC\_CONNECTED UEs, *p-ZP-CSI-RS-ResourceSet* can be configured in *PDSCH-Config-Multicast* for GC-PDSCH rate matching, subject to UE capability. For PDSCH resource mapping with RE symbol level granularity,* the REs indicated by *p-ZP-CSI-RS-ResourceSet* configured in *PDSCH-Config-Multicast* are declared as not available for GC-PDSCH.
* *p-ZP-CSI-RS-ResourceSet* configured in *PDSCH-Config* for unicast do not apply for GC-PDSCHs.
* *p-ZP-CSI-RS-ResourceSet* in *PDSCH-Config-Multicast* for multicast do not apply for unicast PDSCHs.
* The total number of periodic ZP-CSI-RS-Resources *~~p-ZP-CSI-RS-ResourceSet~~* that a UE can be configured with is the same as for unicast in Rel-16
	+ If *p-ZP-CSI-RS-ResourceSet* is configured in both *PDSCH-Config* and PDSCH-Config-Multicast, it is subject to UE capability whether the *p-ZP-CSI-RS-ResourceSet* configured in *PDSCH-Config-Multicast* can be different from the *p-ZP-CSI-RS-ResourceSet* configured in *PDSCH-Config*.

Also include this agreement in an LS to RAN2. |

RAN1 would like to inform RAN2 and RAN3 that the recommendations in R1-2202913 are used for preparation of the list of higher layers parameters.

**2. Actions:**

**To RAN WG2 and RAN WG3**

**ACTION:** RAN1 would like to kindly ask RAN2 and RAN3 to consider the design of the corresponding higher-layer parameters in Rel-17.

**3. Date of Next RAN WG1 Meetings:**

TSG RAN WG1 Meeting #109-e May 16th - 27th, 2022 e-meeting

TSG RAN WG1 Meeting #110 August 22nd - 26th, 2022 Toulouse, France