**3GPP TSG-RAN1 Meeting #110bis-eR1-221xxxx**

**eMeeting, October 10th-19th, 2022**

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| **CHANGE REQUEST** | | | | | | | | |
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|  | **38.213** | **CR** | **---** | **rev** |  | **Current version:** | **17.3.0** |  |
|  | | | | | | | | |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME | **x** | Radio Access Network | **X** | Core Network |  |

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| ***Title:*** | CR on PHR with unified TCI in TS 38.213 | | | | | | | | | |
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| ***Source to WG:*** | Moderator(ZTE), Lenovo, Samsung | | | | | | | | | |
| ***Source to TSG:*** | RAN1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** |  | | | | |  | ***Date:*** | | | 2022-10-17 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | F |  | | | | | ***Release:*** | | | Rel-17 |
|  | *Use one of the following categories:* ***F*** *(correction)* ***A*** *(mirror corresponding to a change in an earlier release)* ***B*** *(addition of feature),* ***C*** *(functional modification of feature)* ***D*** *(editorial modification)*  Detailed explanations of the above categories can be found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) Rel-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15)*  *Rel-16 (Release 16) Rel-17 (Release 17)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | In RAN1#109-e, an agreement was made on power control parameters (i.e., PL-RS, P0, alpha, closed loop index) for calculating Type 1 power headroom based on a reference PUSCH. However, the agreement is not reflected in the specification. This CR proposes to cature the agreement in 38.213.   |  | | --- | | **Agreement**  To calculate the Type 1 power headroom based on a reference PUSCH, the UE uses the PUSCH power control parameters (i.e., PL-RS, P0, alpha, closed loop index) associated with the indicated joint/UL-TCI state. | | | | | | | | | |
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| ***Summary of change:*** | | Capture the texts related to the agreement on power control parameters for calculating the Type 1 power headroom based on a reference PUSCH. | | | | | | | | |
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| ***Consequences if not approved:*** | | How to determine the power control parameters for calculating the Type 1 power headroom based on a reference PUSCH is not clear if a UE is provided DLorJoint-TCIState or UL-TCIstate. | | | | | | | | |
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| ***Clauses affected:*** | | 7.7.1 | | | | | | | | |
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|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **x** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  | **x** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **x** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

# 7.7.1 Type 1 PH report

<Unchanged parts are omitted>

If the UE determines that a Type 1 power headroom report for an activated serving cell is based on a reference PUSCH transmission then, for PUSCH transmission occasion on active UL BWP of carrier of serving cell , the UE computes the Type 1 power headroom report as

 [dB]

where is computed assuming MPR=0 dB, A-MPR=0 dB, P-MPR=0 dB. TC = 0 dB. MPR, A-MPR, P-MPR and TC are defined in [8-1, TS 38.101-1], [8-2, TS 38.101-2] and [8-3, TS 38.101-3]. The remaining parameters are defined in clause 7.1.1 and, if *ul-powerControl* is not provided, and are obtained using and *p0-PUSCH-AlphaSetId* *=* 0, is obtained using *pusch-PathlossReferenceRS-Id =* 0, and . If *ul-powerControl* is provided, and are obtained by *p0-Alpha-CLID-PUSCH-Set* associated with the indicated *TCI-State* or *TCI-UL-State*, is obtained by PL-RS associated with the indicated *TCI-State* or *TCI-UL-State*.

<Unchanged parts are omitted>