**3GPP TSG-RAN WG2 Meeting #109Bis-e R2-2002715**

**E-meeting, April 2020**

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| *CR-Form-v11.4* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **38.321** | **CR** | **0709** | **rev** | **-** | **Current version:** | **16.0.0** |  |
|  | | | | | | | | |
| *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:*** | Introducing a section for handling of Tdelta MAC CE | | | | | | | | | |
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| ***Source to WG:*** | Samsung | | | | | | | | | |
| ***Source to TSG:*** | R2 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_IAB | | | | |  | ***Date:*** | | | 2020-04-09 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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)* | |
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| ***Reason for change:*** | | In the current version of the MAC specification, we have a section on the Timing Delta MAC CE itself, but not a section describing procedural aspects, such as the one we have for Guard Symbols MAC CE and most other MAC CEs closely related to work done in other WGs. | | | | | | | | |
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| ***Summary of change:*** | | A short section on procedural aspects for Timing offset adjustment for IAB is introduced. It is further proposed to place this section within overarching Section 5.18 in the NR MAC, which is typically used for the MAC CEs from other WGs. | | | | | | | | |
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| ***Consequences if not approved:*** | | Lack of information on use of Timing Delta MAC CE. Lack of consistency across the spec in the way procedural aspects are described and captured. | | | | | | | | |
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| ***Clauses affected:*** | | 5.18 Handling of MAC CEs | | | | | | | | |
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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 ... | | |
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| ***Other comments:*** | |  | | | | | | | | |

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| ***This CR's revision history:*** |  |

FIRST CHANGE

### 5.18.x Timing offset adjustment for IAB

For IAB operation, in order to achieve time-domain synchronization across multiple backhaul hops, a timing adjustment Tdelta may be provided to an IAB-MT from its parent IAB-DU. This takes into account adjustments due to e.g. switching between Tx and Rx functions of a node, and is an additional parameter in the TA procedure. This parameter is applicable only to IAB nodes. The Timing Delta MAC CE carries Tdelta, mapped to an index value *Tdelta*.

Upon reception of a Timing Delta MAC CE the MAC entity shall:

1> indicate to lower layers the index value of *Tdelta*.