**3GPP TSG-RAN WG1 Meeting #112bR1-23xxxxx**

**e-meeting, April May 17 – 26, 2023**

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| *CR-Form-v12.2* |
| **DRAFT CHANGE REQUEST** |
|  |
|  | **38.211** | **CR** | **xxxx** | **rev** | **-** | **Current version:** | **17.4.0** |  |
|  |
| *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:***  | Alignment of parameter names |
|  |  |
| ***Source to WG:*** | Ericsson |
| ***Source to TSG:*** |  |
|  |  |
| ***Work item code:*** | NR\_NTN\_solutions-Core |  | ***Date:*** | 2023-05-04 |
|  |  |  |  |  |
| ***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 canbe 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-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
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| ***Reason for change:*** | Misalignment between 38.211 and 38.331 regarding timing parameters for NTN |
|  |  |
| ***Summary of change:*** | Correction of parameter names |
|  |  |
| ***Consequences if not approved:*** | Inconsistent specifications |
|  |  |
| ***Clauses affected:*** | 4.3.1 |
|  |  |
|  | **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:*** |  |

### 4.3.1 Frames and subframes

Downlink, uplink, and sidelink transmissions are organized into frames with  duration, each consisting of ten subframes of  duration. The number of consecutive OFDM symbols per subframe is $N\_{symb}^{subframe,μ}=N\_{symb}^{slot}N\_{slot}^{subframe,μ}$. Each frame is divided into two equally-sized half-frames of five subframes each with half-frame 0 consisting of subframes 0 – 4 and half-frame 1 consisting of subframes 5 – 9.

There is one set of frames in the uplink and one set of frames in the downlink on a carrier.

Uplink frame number  for transmission from the UE shall start $T\_{TA}=\left(N\_{TA}+N\_{TA,offset}+N\_{TA,adj}^{common}+N\_{TA,adj}^{UE}\right)T\_{c}$ before the start of the corresponding downlink frame at the UE where

- $N\_{TA}$ and $N\_{TA,offset}$ are given by clause 4.2 of [5, TS 38.213], except for msgA transmission on PUSCH where $N\_{TA}=0$ shall be used;

- $N\_{TA,adj}^{common}$ given by clause 4.2 of [5, TS 38.213] is derived from the higher-layer parameters *ta-Common*, *ta-CommonDrift*, and *ta-CommonDriftVariant* if configured, otherwise $N\_{TA,adj}^{common}=0$;

- $N\_{TA,adj}^{UE}$ given by clause 4.2 of [5, TS 38.213] is computed by the UE based on UE position and serving-satellite-ephemeris-related higher-layers parameters if configured, otherwise $N\_{TA,adj}^{UE}=0$.



Figure 4.3.1-1: Uplink-downlink timing relation.