**3GPP TSG-RAN WG2 Meeting #116e *Draft\_R2-2111649***

**e-Meeting, 1th - 12th November 2021**

|  |
| --- |
| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  |  | **CR** | **0298** | **rev** |  **2** | **Current version:** | **.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)*.* |
|  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME | **x** | Radio Access Network | **x** | Core Network |  |

|  |
| --- |
|  |
| ***Title:***  | Clarification on Security Coverage |
|  |  |
| ***Source to WG:*** | Samsung |
| ***Source to TSG:*** | RAN2 |
|  |  |
| ***Work item code:*** | TEI15, NR\_IIOT-Core |  | ***Date:*** |  |
|  |  |  |  |  |
| ***Category:*** | **A** |  | ***Release:*** |  |
|  | *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-15 (Release 15)Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)* |
|  |  |
| ***Reason for change:*** | The data field is ciphered, however the definition of the data field, i.e. the coverage of security, is not clear in the current PDCP specification.Specifically for Release 16, it is not clear whether to cipher the EHC header. However, the EHC header is ciphered according to RAN2#107bis agreements:* The EHC function is in PDCP
* The EHC header is located after the SDAP header, and it is ciphered
 |
|  |  |
| ***Summary of change:*** | To add a NOTE “All fields other than PDCP PDU header and MAC-I belong to Data field” to Section 6.3.3 to clarify the coverage of ciphering including that EHC header is ciphered. **Impact analysis**Impacted functionality: Security, Ethernet Header CompressionInter-operability: If the network is implemented according to the CR while the UE is not, it is not clear which part of PDCP PDU UE shall cipher, i.e. the UE may not cipher the EHC header, which can cause the deciphering failure in the network side.If the UE is implemented according to the CR while the network is not, it is not clear which part of PDCP PDU the network shall cipher, i.e. the network may not cipher the EHC header, which can cause the deciphering failure in the UE side. |
|  |  |
| ***Consequences if not approved:*** | Which part of PDCP PDU UE shall cipher, specifically for EHC header, remains unclear. It may cause unnecessary deciphering failure.  |
|  |  |
| ***Clauses affected:*** | 6.3.3 |
|  |  |
|  | **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:*** |  |

*<Start of modification>*

### 6.3.3 Data

Length: Variable

The Data field may include either one of the following:

- Uncompressed PDCP SDU (user plane data, or control plane data); or

- Compressed PDCP SDU (user plane data only); or

- UDC header and UDC Data Block if UDC is configured.

NOTE: All fields other than PDCP PDU header and MAC-I belong to Data field.‎

*<End of modification>*