**3GPP TSG-SA3 Meeting #124 draft\_S3-253800-r1 was S3-253168**

**Wuhan, China, 13 – 17 October 2025**

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| *CR-Form-v12.1* |
| **CHANGE REQUEST** |
|  |
|  | **33.369** | **CR** | 0007 | **rev** | 1 | **Current version:** | **19.0.0** |  |
|  |
| *For* ***[HE](http://www.3gpp.org/3G_Specs/CRs.htm%22%20%5Cl%20%22_blank)******[LP](http://www.3gpp.org/3G_Specs/CRs.htm%22%20%5Cl%20%22_blank)*** *on using this form: comprehensive instructions can be found at <http://www.3gpp.org/Change-Requests>.* |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network |  |

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| ***Title:***  | Add the key hierarchy to TS 33.369 |
|  |  |
| ***Source to WG:*** | ZTE Corporation |
| ***Source to TSG:*** | S3 |
|  |  |
| ***Work item code:*** | AmbientIoT-SEC |  | ***Date:*** | 2025-9-22 |
|  |  |  |  |  |
| ***Category:*** | F |  | ***Release:*** | Rel-19 |
|  | *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:*** | There are various keys for the AIOT services. It is better to provide a key hierarchy figure to show the meaning of the used keys. |
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| ***Summary of change:*** | Add the key hierarchy . |
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| ***Consequences if not approved:*** | May be difficult to understand the meaning and the place of the keys. |
|  |  |
| ***Clauses affected:*** | 5.x(new) |
|  |  |
|  | **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:*** |  |

\* \* \* \* First Change \* \* \* \*

## 5.x Key hierarchy



Figure 5.x-1: Key hierarchy for AIoT service

The different layers of keys are the following:

- KAIOT\_root: The long-term credentials used for authentication.

- KAIOTF: This key is derived from KAIOT\_root and is used derive keys that to protect the command messages between the AIoT device and AIOTF.

- KCommand\_enc, KCommand\_int : The KCommand\_enc and KCommand\_int are used for protecting command messages,

\* \* \* \* End of Changes \* \* \* \*