**3GPP TSG-SA3 Meeting #120 S3-25xxxx**

**Athens, Greece, 17 - 21 February 2025**

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| *CR-Form-v12.1* | | | | | | | | |
| **Draft CHANGE REQUEST** | | | | | | | | |
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|  | **33.401** | **CR** | **draft** | **rev** |  | **Current version:** | **18.2.0** |  |
|  | | | | | | | | |
| *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 |  | Radio Access Network |  | Core Network | **x** |

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| ***Title:*** | Skeleton for security aspects of 5G satellite access phase 3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | CATT | | | | | | | | | |
| ***Source to TSG:*** | S3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 1060065 | | | | |  | ***Date:*** | | | 2025-04-07 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***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 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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Security for 5G satellite access phase 3 is not specified yet. | | | | | | | | |
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| ***Summary of change:*** | | In addation to the existing Annex X (normative) in the Living document for TS 33.401, propose to add a new Annex Y (informative) in TS 33.401 to describe the informative work related to satellite. | | | | | | | | |
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| ***Consequences if not approved:*** | | Specification is not complete. | | | | | | | | |
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| ***Clauses affected:*** | | Annex X (new), Annex Y (new) | | | | | | | | |
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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:*** | |  | | | | | | | | |

\*\*\* Start of 1st Change \*\*\*

Annex X (normative):  
Security for Store and Forward Satellite operation

# X.1 General

This Annex describes the security aspects of Store and Forward Satellite operation. The general features of Store and Forward Satellite operation are described in 23.401 [2].

There are two example deployment options for Store and Forward Satellite operation given in Annex O of TS 23.401 [2], i.e. Split MME architecture and Full EPC in each satellite. In both cases, regular LTE procedures are used to provide the security between the UE and network, e.g. authentication and protection of traffic between the UE and network.

The security of communications between the proxies on satellite and the ground station(s) is out of 3GPP scope.

# X.2 Security aspects of Split MME architecture

Editor’s Note: This clause describes the security aspects of Split MME architecture to support Store and Forward Satellite operation.

## X.2.1 Protection against DoS attacks

Editor’s Note: This sub-clause describes the mechanisms to protect against DoS attacks in Split MME architecture with Store and Forward Satellite operations.

# X.3 Security aspects of Full EPC in each satellite

Editor’s Note: This clause describes the security aspects of Full EPC in each satellite architecture to support Store and Forward Satellite operation.

\*\*\* End of Change \*\*\*