**3GPP TSG-SA3 Meeting #99e *S3-201443***

**e-meeting, 11 -15 May 2020** Revision of S3-201392

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **33.401** | **CR** | **0695** | **rev** | 2 | **Current version:** | **16.2.0** |  |
|  | | | | | | | | |
| *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 | **X** | Radio Access Network |  | Core Network | **X** |

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|  | | | | | | | | | | |
| ***Title:*** | Security Aspects of DNS and ICMP | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Qualcomm Incorporated | | | | | | | | | |
| ***Source to TSG:*** | S3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | UPIP\_SEC | | | | |  | ***Date:*** | | | 2020-05-20 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | B |  | | | | | ***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)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | In EPS, UP IP is not supported on the Uu interface. Lack of support for UP IP may allow an attacker to modify the user plane data over the air undetected, leading to a security vulnerability that may be exploited when DNS or ICMP messages are carried over the user plane. | | | | | | | | |
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| ***Summary of change:*** | | Addition of Annex Y that refers to Annex X (Security Aspects of DNS and ICMP) of TS 33.501 so that DNS and ICMP messages can be protected in EPS. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | DNS and ICMP messages remain vulnerable in EPS. | | | | | | | | |
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| ***Clauses affected:*** | | Annex Y (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:*** | | Approval of this CR is dependent on the approval of CR#0841 to TS 33.501 in S3-201442 | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* Start of the changes \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Annex Y (informative):  
Security Aspects of DNS and ICMP

# X.1 General

The security measures specified in Annex X of TS 33.501 [43] can be used to protect the DNS and ICMP messages that are carried over the user plane.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* End of the changes \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*