**3GPP TSG-SA3 Meeting #99e *S3-201238-r1***

**e-meeting, 11 – 15 May 2020**

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| *CR-Form-v12.0* |
| **CHANGE REQUEST** |
|  |
|  | **33.819** | **CR** | **0003** | **rev** | **1** | **Current version:** | **16.0.0** |  |
|  |
| *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 | **x** | ME | **x** | Radio Access Network | **x** | Core Network | **x** |

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|  |
| ***Title:***  | Requirements for Key Issue 2.1 on Interworking |
|  |  |
| ***Source to WG:*** | Nokia, Interdigital |
| ***Source to TSG:*** | S3 |
|  |  |
| ***Work item code:*** | FS\_VERTICAL\_LAN\_SEC |  | ***Date:*** | 15.5.2020 |
|  |  |  |  |  |
| ***Category:*** | F |  | ***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 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-12 (Release 12)**Rel-13 (Release 13)Rel-14 (Release 14)Rel-15 (Release 15)Rel-16 (Release 16)* |
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| ***Reason for change:*** | Potential security requirements were FFS. It is concluded that no normative work for this key issue is required since it is already addressed by the existing specification. Thus, no security requirements are provided. |
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| ***Summary of change:*** | Statement for no security requirements provided is added. |
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| ***Consequences if not approved:*** | Unresolved FFS. |
|  |  |
| ***Clauses affected:*** | 5.2.1.3 |
|  |  |
|  | **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:*** | S3-200377 |

\*\*\*\*\*\*\*\* START OF CHANGES

### 5.2.1 Key Issue #2.1: Authentication and Authorization for Interworking, Roaming between NPN and PLMN

#### 5.2.1.1 Key issue details

There is a need for 5GS to support non-public operations for an enterprise using Non Public Networks (NPN) deployed in plants or factories. The envisioned deployment options for NPN are: standalone, hosted by a PLMN or a slice from a PLMN.

The purpose of this key issue is to identify specific issues for authentication and authorization when a UE needs to access and obtain services offered from a PLMN via a NPN and vice versa. Where a roaming agreement between a PLMN operator and an NPN operator allow, it need to be studied what security model could be adopted with authentication in both networks or authentication in only one of the networks, e.g. if a PLMN need to authenticate a UE for network access and to grant service over PLMN network.

In this key issue, a UE authentication with a PLMN (using credentials needed for PLMN) is called "PLMN Authentication" and with NPN (using credentials needed for NPN) is called "NPN Authentication".

This key issue assumes that:

- Authentication methods, identities, credentials for PLMN access are 3GPP only.

 - NPN may or may not be considered trusted by PLMN.

 - PLMN is considered trusted by NPN.

- PLMN Authentication is mandatory to access PLMN offered services via NPN.

The security aspects of authentication and authorization for PLMN and NPN interworking and roaming (including simultaneous access) are as follows:

- The UE identifier used for NPN Authentication.

- The NPN Authentication may use 3GPP or non 3GPP based credentials (e.g. using the EAP framework).

- When a UE is already authenticated/registered with the PLMN, an additional NPN authentication may or may not be performed to access and obtain NPN services via the PLMN.

#### 5.2.1.2 Security threats

Access of UEs to NPN offered services via PLMN unauthorized by NPN and/or PLMN.

Access of UEs to PLMN offered services via NPN unauthorized by NPN and/or PLMN.

#### 5.2.1.3 Potential security requirements

It is concluded that no normative work for this key issue is required since it is already addressed by the existing specification. Thus, potential security requirements for this key issue are not addressed in the present document.

\*\*\*\*\*\*\*\* END OF CHANGES