**3GPP TSG- Meeting #**

**, , - Revision of**

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

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| ***Title:*** |  | | | | | | | | | |
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| ***Source to WG:*** |  | | | | | | | | | |
| ***Source to TSG:*** |  | | | | | | | | | |
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| ***Work item code:*** |  | | | | |  | ***Date:*** | | |  |
|  |  | | | |  | |  | | |  |
| ***Category:*** |  |  | | | | | ***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 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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
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| ***Reason for change:*** | | According to SA3 specification for Ranging TS 33.533 v18.0.0 the exposure via the control plane shall reuse authorization procedure for MO-LR.  In MO-LR procedure the AMF check the subcription details whether the UE is allowed to use the MO-LR service.  There is no privacy check for MO-LR as this legacy procedure would not require such check. However, in Ranging when a SL Positioning Client UE invokes the MO-LR for Sidelink exposure service the SL-MT-LR procedure will be triggered by the serving AMF, and the SL-MT-LR procedure specifies that the network must check the privacy details by checking the privacy profile. The SL-MT-LR can also be triggered by NEF, AF or LCS Client.  The current Privacy profile is designed to check whether an LCS Client or AF is allowed or not allowed to retrieve the location of the UE either with UE notification or without UE notification. SA3 has specified that the Privacy Profile check is reused for the SL-MT-LR procedure. SA3 not suggested any other privacy check for when a SL Positioning Client UE triggers the SL-MT-LR procedure. It is assumed that the same Privacy Profile check is performed for LCS Client, AF and SL Positioning Client UE when triggering the SL-MT-LR.  There has been proposal in SA2 to add LCS Client(s) into the LCS Privacy Profile to allow the network to authorize the SL Positioning Client UE. However, there are some limits and unresolved issues remaining: there is no consideration of privacy exposure to other SL Positioning UEs such as SL Positioning Server UEs, Located UEs, Reference UEs, with which the privacy breach is equally or more servere in security damages. | | | | | | | | |
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| ***Summary of change:*** | | The SLPKMF assign the SL Positioning UE role upon receiving the request from the participating UE. After authorization for the UE role, the SLPKMF assign the role to the requesting UE, based on the UDR Location Privacy Profile and SL Positioning Policy and other network inforation. The SLPKMF digitally signs the role along with the privacy list back to the UE that requests the SL Positioning UE role. | | | | | | | | |
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| ***Consequences if not approved:*** | | There is no complete procedure for a network function to check in the SL Positioning UE Privacy/authorization whether a SL Positioning Client/Server/Located/Reference UE is allowed to retrieve the location for a UE or not. | | | | | | | | |
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| ***Clauses affected:*** | | 6.3 | | | | | | | | |
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|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  |  | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  |  | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  |  | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

\* \* \* \* First change \* \* \* \*

## 6.3 Authorization for Ranging/SL positioning service

### 6.3.1 General

According to clause 4.1 of TS 23.586 [2], a UE capable of Ranging/SL Positioning may take different roles roles (e.g., Target UE, SL Reference UE, Located UE, SL Positioning Server UE) in various Ranging/SL Positioning operations. Each of the UEs in a Ranging/SL Positioning service acts in its own authorized role. The UE shall follow the policy/parameters defined in clause 5.1 of TS 23.586 [2] for authorization with the network. TS 23.586 [2] clause 5.6 also specifies that Ranging/SL Positioning service can be exposed to an authorized SL Positioning Client UE5GC NF or AF or LCS client to obtain the relative or absolution distance/direction result between two UEs capable of Ranging/SL positioning.

This clause specifies the authorization requirements and procedures for the operations in Ranging/SL positioning services wherever authorization or privacy check is required.

### 6.3.2 Authorization requirements

The 5G system shall support the authorization of the role of the UE (e.g. as a Target UE/SL Reference UE/SL Positioning Server UE/Located UE) in a Ranging/Sidelink Positioning service.

The 5G system shall support authorization of the UE for Ranging/SL positioning communication in unicast mode, broadcast/groupcast mode.

The 5G system shall support authorization of the AF, 5GC NF, LCS Client or SL Positioning Client UE, for Ranging/SL Positioning service exposure.The 5G system shall support authorization of the SL Target UE/SL Reference UE/Located UE for Ranging/SL Positioning service privacy information sharing between peer UEs.

The 5G system shall support privacy protection of the to-be-measured UEs for Ranging/SL Positioning service exposure.

Note: It is assumed that all the SL UE(s) selected as SL Positioning Server UE are assumed to be trusted and therefore not required for authorization.

\* \* \* \* End of change \* \* \* \*