**3GPP TSG-SA3 Meeting #123 S3-25XXXX**

**Goteborg, Sweden, 25 – 28 August 2025**

**Source: China Telecom**

**Title: New SID on security for 6G Localized Network**

**Document for: Approval**

**Agenda Item: 6.3**

3GPP™ Work Item Description

Information on Work Items can be found at <http://www.3gpp.org/Work-Items>
See also the [3GPP Working Procedures](http://www.3gpp.org/specifications-groups/working-procedures), article 39 and the TSG Working Methods in [3GPP TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm)

Title: Study on security for 6G Localized Network

Acronym:

Unique identifier:

{A number to be provided by MCC at the plenary}

Potential target Release: Rel-20

# 1 Impacts

{For Normative work, identify the anticipated impacts. For a Study, identify the scope of the study}

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Affects: | UICC apps | ME | AN | CN | Others (specify) |
| Yes |  |  |  |  |  |
| No |  |  |  |  |  |
| Don't know |  |  |  |  |  |

# 2 Classification of the Work Item and linked work items

## 2.1 Primary classification

### This work item is a …

|  |  |
| --- | --- |
| X | Study  |
|  | Normative – Stage 1 |
|  | Normative – Stage 2 |
|  | Normative – Stage 3 |
|  | Normative – Other\* |

**\* Other = e.g. testing**

## 2.2 Parent Work Item

For a brand-new topic, use “N/A” in the table below. Otherwise indicate the parent Work Item.

|  |
| --- |
| Parent Work / Study Items  |
| Acronym | Working Group | Unique ID | Title (as in 3GPP Work Plan) |
|  N/A |  |  |  |

### 2.3 Other related Work Items and dependencies

|  |
| --- |
| Other related Work /Study Items (if any) |
| Unique ID | Title | Nature of relationship |
|  |  |  |
|  |  |  |

# 3 Justification

# 4 Objective

**WT**: Study the security for 6G Localized Network. More specifically,

1. Study the mechanisms to authenticate and authorize with different granularity, e.g. users, network elements, 3rd parties.

2. Study the mechanisms for localized networks to authenticate and authorize devices/UEs locally.

3. Study the mechanisms for integrity protection, replay protection and confidentiality protection to information needed for local control when it is transferred to localized networks.

4. Study the mechanisms for integrity and confidentiality protection to information needed for local control when it is stored in localized networks.

5. Study the mechanisms to support differentiated identities for localized networks, e.g. identities of network elements in localized networks which can be created and deleted on demand.

6. Study the mechanisms to support dynamic authentication and authorization on demand.

7. Study the mechanisms to coordinate the security mechanism of localized networks to ensure service continuity between PLMN and localized networks..

# 5 Expected Output and Time scale

|  |
| --- |
| New specifications {One line per specification. Create/delete lines as needed} |
| Type  | TS/TR number | Title | For info at TSG#  | For approval at TSG# | Rapporteur |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

|  |
| --- |
| Impacted existing TS/TR {One line per specification. Create/delete lines as needed} |
| TS/TR No. | Description of change  | Target completion plenary# | Remarks |
|  |  |  |  |
|  |  |  |  |

# 6 Work item Rapporteur(s)

# 7 Work item leadership

SA3

# 8 Aspects that involve other WGs

None

# 9 Supporting Individual Members

{At least 4 supporting Individual Members are needed. There is an expectation that these companies will provide resources to progress the work. Note that having 4 supporting companies is a necessary but not sufficient condition: the usual TSG approval process by consensus is needed for the WID approval}

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| --- |
| Supporting IM name |
| China Telecom |
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