**3GPP TSG-SA5 Meeting #142-e *S5-222347***

e-meeting, 4 -12 Apr 2022

**Source: China Telecom, Huawei, China Unicom**

**Title: New SID on network traffic abstraction information for exposure**

**Document for: Approval**

**Agenda Item: 6.2**

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 network traffic abstraction information for exposure

Acronym: FS\_NTA

Unique identifier:

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

Potential target Release: Rel-18

# 1 Impacts

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

# 2 Classification of the Work Item and linked work items

## 2.1 Primary classification

### This work item is a …

|  |  |
| --- | --- |
|  | Feature |
|  | Building Block |
|  | Work Task |
| X | Study Item |

## 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 |
| 910026 | Study on management aspects of network slice management capability exposure (FS\_NSCE) | Potential exposure mechanism may be reused. |
| 910027 | Enhancements of Management Data Analytics Service (eMDAS) |  |
|  |  |  |

# 3 Justification

As described in TS 22.101, “the 3GPP Network allows a 3rd party service provider to benefit from network provided services and capabilities that are exposed by the PLMN. A standardized exposure of network services/capabilities reduces the complexity of different 3rd parties to access different 3GPP network services and capabilities.” It means that MNOs can exposure necessary abstraction network information to make the 3rd parties benefit from it.

User traffic distribution of the network can be considered as one of the abstraction network information to vertical industries. Different from the traditional network that aims at network operation, this user traffic information could be used by vertical industries for their business planning purposes. For example, user traffic map can help bus companies plan bus routes, and also help scenic spot management design tourist service stations.

However, if the measurement data is directly sent to the 3rd parties, the data is not only redundant, but also difficult to read. Especially for network providers, users’ privacy and network business secrets are also involved. At this time, operators need to abstract the network information to avoid privacy risks so that vertical industries can directly apply it and help them execute accurate service planning. This will enable 3rd parties to improve operational efficiency.

Therefore, to help 3rd parties execute better service planning, it is necessary to identify the use cases and requirements regarding exposure of necessary abstraction network information, including potential interactions between MNOs and 3rd parties in terms of information exchanged, to make the vertical industries benefit from it without burdening the network.

# 4 Objective

The objectives of this study item include:

* Study the traffic abstraction information related use cases and requirements regarding exposure of necessary abstraction network information to make the vertical benefit from it.
* Investigate the roles involved in the above use cases, and identify the potential information which need to be exchanged between them including the information provided from MNOs to 3rd parties and standardized feedbacks provided by 3rd parties to MNOs.
* Study the existing mechanisms needed for specifying and handling the abstraction network information identified above, reuse the existing mechanisms if appropriate.
* Derive recommendations for a normative work item if needed.

# 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** |
| TR | 28.XXX | Study on precise network traffic abstraction information for service planning | TSG#98 | TSG#99 | Chen, Xiumin (chenxiumin<at>chinatelecom<dot>cn) |

# 6 Work item Rapporteur(s)

Chen, Xiumin, China Telecom (chenxiumin<at>chinatelecom<dot>cn)

# 7 Work item leadership

SA5

# 8 Aspects that involve other WGs

None identified yet.

# 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 |
| Huawei |
| China Unicom |
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