**3GPP TSG-SA5 Meeting #141-e *S5-221353rev4***

e-meeting, 17 -26 January 2022 (revision of S5-221204)

Source: China Unicom

Title: New SID on Management Aspect Enhancement of 5G MOCN Network Sharing

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 Management Aspect Enhancement of 5G MOCN Network Sharing Phase2

Acronym: FS\_MANS\_phase2

Unique identifier:

Potential target Release: *Rel-18*

# 1 Impacts

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

# 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

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

### 2.3 Other related Work Items and dependencies

|  |
| --- |
| Other related Work /Study Items (if any) |
| Unique ID | Title | Nature of relationship |
| 900021 | Management Aspects of 5G Network sharing | {optional free text}  |

Dependency on non-3GPP (draft) specification:

# 3 Justification

5G network sharing, especially the 5G MOCN scenario, is essential to save construction costs for network operators. So far, requirements of configuration, management authority and performance measurement for network sharing have been covered in TS 32.130. The NRM and part of performance measurement for 5G MOCN network sharing have been researched in R17's MANS project. With the deployment and operation of 5G MOCN network, more and more new detailed management requirements need be investigated for 5G MOCN network sharing, including but not limited to the following:

* The management architecture of network sharing in TS 32.130 is not Service-based Architecture, which cannot meet the management requirements of 5G MOCN network sharing.
* More functional requirements of the interface between NMs need to be defined to support the POP’s network operation. For example, MOP-NM needs to get different data from MOP-SR-DM,and put different data to different POP-NM.
* The performance measurement in TS 28.552 cannot fully evaluate the network performance of 5GMOCN network sharing,for example,measurement related to mobility management does not include PLMN granularity,the number of shared PRB/non-shared PRB is not defined.

In order to satisfy the requirements, it is necessary to propose a Technical Report (non-normative) document for corresponding study work, which needs to be carried out to explore solutions. In addition, for the subsequent management aspect enhancement of 5G MOCN network sharing, this SI may make some contributions to the future network development.

# 4 Objective

The objectives of this study item are:

* Investigate the management architectureof 5G MOCN network sharing.
* Investigate the requirements between Participating Operator(POP) and Master Operator(MOP), and impact on interaction between Master Operator(MOP) and Network Equipment Provider(NEP).
* Investigate more performance measurements for 5G MOCN network sharing.

# 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 |
| Internal TR | 28.XXX | Study on Management Aspect Enhancement of 5G Network Sharing Phase2 | SA#96 (June 2022) | SA#97 (Sep 2022) | Zhaoning Wang, ChinaUnicom, wangzn18@chinaunicom.cn |
|  |  |  |  |  |  |

|  |
| --- |
| 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)

Zhaoning Wang, ChinaUnicom, wangzn18@chinaunicom.cn

# 7 Work item leadership

SA5

# 8 Aspects that involve other WGs

# 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 Unicom |
| Huawei |
| ZTE |
| CATT |
| CMCC |
| China Telecom |
| Orange |