**3GPP TSG-SA5 Meeting #146-bis-e *S5-231110***

**e-meeting**, 16 -19 January 2023

(revision of xx-yyxxxx)

**Source: China Mobile**

**Title: New WID on Management of cloud-native Virtualized Network Functions**

**Document for: Approval**

**Agenda Item: 6.2.2**

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: New WID on Management of cloud-native Virtualized Network Functions

Acronym: MCVNF

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 |  |  |  |  | X |

# 2 Classification of the Work Item and linked work items

## 2.1 Primary classification

### This work item is a …

|  |  |
| --- | --- |
| X | Feature |
|  | Building Block |
|  | *Work Task* |
|  | 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 |
| 950032 | Study on Management of cloud-native Virtualized Network Function | Preceding Study Item (FS\_MCVNF) |

**Dependency on non-3GPP (draft) specification: None**

# 3 Justification

TR 28.834 is an ongoing study item on the management of cloud-native Virtualized Network Functions (FS\_MCVNF), which has identified some use cases and solutions.

For example, in the use case scenario where NF creation as a cloud native VNF, the 3GPP management system shall have a capability to interact with ETSI NFV MANO for creation of NF as a containerised VNF. The solution to this requirement is re-using the existing procedure in clause 7.10 in TS 28.531, and the latest Release 4 specifications from ETSI NFV should be introduced.

Therefore, it is necessary to complete the relevant standardization work in the new WID.

# 4 Objective

The objectives of this WID includes:

* Specify management enhancements for the cloud native VNFs, such as by collaborating with the latest Release 4 specifications from ETSI NFV to allow NF creation as a cloud native VNF, etc.
* More specifically, in clause 7.10 in TS 28.531, if NF instance to be created contains virtualized part and containerized resource needs to be allocated, NFMS\_P interacts with ETSI NFV MANO for VNF instance creation by using the operation produced by ETSI NFV MANO as specified in ETSI NFV release 4 specification. For example,
  + if needed the NFMS\_P invokes corresponding VNF Package management procedure as described in clause 7.7 in ETSI NFV-IFA013 V4.3.1. The VNF package which support designing a VNFD for a containerized VNF is complied with ETSI GS NFV-IFA 011 V4.3.1.
  + The NFMS\_P invokes VNF lifecycle management procedure by interworking with ETSI NFV MANO as described in clause 7.3.5 (update NS operation) in ETSI NFV-IFA013 V4.3.1 or in clause 7.2.3 (Instantiate VNF operation) in ETSI GS NFV-IFA 008 V4.3.1.

# 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 |
| TS 28.531 | Add management enhancements for the cloud native VNFs | Dec 2023 (SA#102) |  |
|  |  |  |  |

# 6 Work item Rapporteur(s)

China Mobile Guangjing Cao (caoguangjing@chinamobile.com)

# 7 Work item leadership

SA5

# 8 Aspects that involve other WGs

# 9 Supporting Individual Members

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| Supporting IM name |
| China Mobile |
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