**3GPP TSG-SA5 Meeting #139-e *S5-215099***

e-meeting, 11 - 20 October 2021 (revision of xx-yyxxxx)

**Source: SA5**

**Title: New WID on PaaS for Virtualized Network Functions**

**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:PaaS for Virtualized Network Functions

Acronym:P-NFV

Unique identifier: XXXXXX

Potential target Release:Rel-18

# 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 |  |  | X | 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 …

|  |  |
| --- | --- |
| 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) |
| N/A |  |  |  |

### 2.3 Other related Work Items and dependencies

{List here other Work Items which relate to the proposed one, such as a Work Item in an earlier Release if further enhancing the feature from the previous Release)}

|  |
| --- |
| Other related Work /Study Items (if any) |
| Unique ID | Title | Nature of relationship |
|  |  | {optional free text}  |

# 3 Justification

PaaS can provide platform capabilities or services through APIs, and it can help manage different NFVI platforms, which can be applied in the operator's NFV environment to reduce the workload of developers.

ETSI GR NFV-IFA029 studies the potential impact on the NFV architecture of providing "PaaS"-type capabilities, and it studies the potential architectural enhancements. The ETSI GR NFV-IFA029 gives the introduction of PaaS with capability to support VNF common and dedicated services, and studies those related use cases and concepts. It also envisages several potential architecture options for PaaS related use cases, where PaaS services are modeled as VNFs, a new type of NFVI resources and a new type of object specific to the PaaS layer in its clause 7.1.

Although NFV-IFA029 focus on the PaaS for VNFs and gives some valuable progress results. However, it is worth noting that there is still a lot of work to need to be followed up on the introduction of PaaS into VNFs, especially the impact on the 3GPP Management System, use case and optional solution, etc.

It is necessary to identify the potential impact on the NFV architecture of providing PaaS capabilities, and if needed, potential solutions should also be studied.

# 4 Objective

The objectives of this work item includes:

* Specify the use cases for the PaaS capabilities of virtualized networks, which are applicable to 3GPP, taking into account the relevant use cases from ETSI.
* Identify the requirements for potential solutions and analyze the necessity for the introduction of PaaS.
* Identify the potential impacts on the existing 3GPP Management reference model..
* Specify the related function of VNF which can be provided by a PaaS.
* Specify interface requirements for the interaction of the 3GPP Management system.

# 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 |
| TS | 28.XXX |  |  |  |  |
|  |  |  |  |  |  |

|  |
| --- |
| 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)

China Mobile Guangjing Cao (caoguangjing@chinamobile.com)

# 7 Work item leadership

SA WG5.

# 8 Aspects that involve other WGs

# 9 Supporting Individual Members

|  |
| --- |
| Supporting IM name |
| CHINA MOBILE |
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