**3GPP TSG-SA5 Meeting #140-e *S5-216378rev1***

**e-meeting, 15 - 24 November 2021**

**Source: Lenovo, Motorola Mobility, CMCC**

**Title: pCR - 28.819 Add intial recomendations**

**Document for: Approval**

**Agenda Item: 6.5.5**

# 1 Decision/action requested

***Please approve***

# 2 References

# 3 Rationale

*Add recommendations based on scenarios and some solutions*

# 4 Detailed proposal

Start of changes

# 8 Conclusions and Recommendations

The process described in Section 7 puts several requirements on the NF as well as the 3GPP management system which should be further standardized to enable cross-vendor automation of the CI-CD and testing pipelines.

**Recommendation 1:** A newly delivered NF should have significant standardized supporting information to help the 3GPP management system identify the set of tests relevant to the new NF and how to include the tested NF in operations. Examples of this information include:

* The NF types
* The previous NF it replaces
* The new list of optional features and the corresponding variables to enable/disable those features
* The tests to be run on the NF as proposed by the vendor
* Vendor information
* Feedback address

Further work is required to specify an exhaustive list of such information.

**Recommendation 2:** For R18 3GPP SA5 needs to study software management aspects. Examples include:

* What information is needed in a software inventory
* How and where are NF versions stored
* How are they maintained – for example: updated and replaced
* ?

**Recommendation 3:** 3GPP SA5 should work of specifying the following management functions/capabilities for management system:

* Coordinate tests for the CI-CD and operational testing and maintain information such as which tests are relevant for which NF
* Test task and test case management, test orchestration
* Uniformly collect and handle testing related data, be responsible for data fiter and processing to support the feedback to vendor
* Collec an maintain information that may need to be provided to the 3GPP NF supplier, examples include:
	+ NF identifier
	+ Test results
	+ Description of problem
	+ Time stamp (e.g. the time when the problem occurred, the duration of the problem)
	+ Analysis report
	+ Address of logs

Further work is required to specify an exhaustive list of such information.

**Recommendation 4:** 3GPP SA5 should work of specifying enablers and solutions to perform and automate operational testing and enable automatic rollout of the new NF version into the operational environment.

Editor’s note: Further recommendations to be added prior to finalization based on further discussions.

End of changes